may be returned, but only if the obligations are not claimed as deductions from the gross estate.

§ 20.2031–6 Valuation of household and personal effects.

(a) *General rule.* The fair market value of the decedent's household and personal effects is the price which a willing buyer would pay to a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts. A room by room itemization of household and personal effects is desirable. All the articles should be named specifically, except that a number of articles contained in the same room, none of which has a value in excess of $100, may be grouped. A separate value should be given for each article named. In lieu of an itemized list, the executor may furnish a written statement, containing a declaration that it is made under penalties of perjury, setting forth the aggregate value as appraised by a competent appraiser or appraisers of recognized standing and ability, or by a dealer or dealers in the class of personalty involved.

(b) *Special rule in cases involving a substantial amount of valuable articles.* Notwithstanding the provisions of paragraph (a) of this section, if there are included among the household and personal effects articles having marked artistic or intrinsic value of a total value in excess of $3,000 (e.g., jewelry, furs, silverware, paintings, etchings, engravings, antiques, books, statuary, vases, oriental rugs, coin or stamp collections), the appraisal of an expert or experts, under oath, shall be filed with the return. The appraisal shall be accompanied by a written statement of the executor containing a declaration that it is made under the penalties of perjury as to the completeness of the itemized list of such property and as to the disinterested character and the qualifications of the appraiser or appraisers.

(c) *Disposition of household effects prior to investigation.* If it is desired to effect distribution or sale of any portion of the household or personal effects of the decedent in advance of an investigation by an officer of the Internal Revenue Service, information to

that effect shall be given to the district director. The statement to the district director shall be accompanied by an appraisal of such property, under oath, and by a written statement of the executor, containing a declaration that it is made under the penalties of perjury, regarding the completeness of the list of such property and the qualifications of the appraiser, as heretofore described. If a personal inspection by an officer of the Internal Revenue Service is not deemed necessary, the executor will be so advised. This procedure is designed to facilitate disposition of such property and to obviate future expense and inconvenience to the estate by affording the district director an opportunity to make an investigation should one be deemed necessary prior to sale or distribution.

(d) *Additional rules if an appraisal involved.* If, pursuant to paragraphs (a), (b), and (c) of this section, expert appraisers are employed, care should be taken to see that they are reputable and of recognized competency to appraise the particular class of property involved. In the appraisal, books in sets by standard authors should be listed in separate groups. In listing paintings having artistic value, the size, subject, and artist's name should be stated. In the case of oriental rugs, the size, make, and general condition should be given. Sets of silverware should be listed in separate groups. Groups or individuals pieces of silverware should be weighed and the weights given in troy ounces. In arriving at the value of silverware, the appraisers should take into consideration its antiquity, utility, desirability, condition, and obsolescence.

§ 20.2031–7 Valuation of annuities, interests for life or term of years, and remainder or reversionary interests.

(a) *In general.* Except as otherwise provided in paragraph (b) of this section and § 20.7520–3(b) (pertaining to certain limitations on the use of prescribed tables), the fair market value of annuities, life estates, terms of years, remainders, and reversionary interests for estates of decedents is the

present value of such interests, determined under paragraph (d) of this section. The regulations in this and in related sections provide tables with standard actuarial factors and examples that illustrate how to use the tables to compute the present value of ordinary annuity, life, and remainder interests in property. These sections also refer to standard and special actuarial factors that may be necessary to compute the present value of similar interests in more unusual fact situations.

(b) *Commercial annuities and insurance contracts.* The value of annuities issued by companies regularly engaged in their sale, and of insurance policies on the lives of persons other than the decedent, is determined under § 20.2031–8. See § 20.2042–1 with respect to insurance policies on the decedent's life.

(c) *Actuarial valuations.* The present value of annuities, life estates, terms of years, remainders, and reversions for estates of decedents for which the valuation date of the gross estate is after April 30, 1999, is determined under paragraph (d) of this section. The present value of annuities, life estates, terms of years, remainders, and reversions for estates of decedents for which the valuation date of the gross estate is before May 1, 1999, is determined under the following sections:

Valuation date		Applicable regulations
After	Before	
	01–01–52	20.2031–7A(a)
12–31–51	01–01–71	20.2031–7A(b)
12–31–70	12–01–83	20.2031–7A(c)
11–30–83	05–01–89	20.2031–7A(d)
04–30–89	05–01–99	20.2031–7A(e)

(d) *Actuarial valuations after April 30, 1999*—(1) *In general.* Except as otherwise provided in paragraph (b) of this section and § 20.7520–3(b) (pertaining to certain limitations on the use of prescribed tables), if the valuation date for the gross estate of the decedent is after April 30, 1999, the fair market value of annuities, life estates, terms of years, remainders, and reversionary interests is the present value determined by use of standard or special section 7520 actuarial factors. These factors are derived by using the appropriate section 7520 interest rate and, if applicable, the mortality component

for the valuation date of the interest that is being valued. For purposes of the computations described in this section, the age of an individual is the age of that individual at the individual's nearest birthday. See §§ 20.7520–1 through 20.7520–4.

(2) *Specific interests*—(i) *Charitable remainder trusts.* The fair market value of a remainder interest in a pooled income fund, as defined in § 1.642(c)–5 of this chapter, is its value determined under § 1.642(c)–6(e) of this chapter. The fair market value of a remainder interest in a charitable remainder annuity trust, as defined in § 1.664–2(a) of this chapter, is the present value determined under § 1.664–2(c) of this chapter. The fair market value of a remainder interest in a charitable remainder unitrust, as defined in § 1.664–3 of this chapter, is its present value determined under § 1.664–4(e) of this chapter. The fair market value of a life interest or term of years in a charitable remainder unitrust is the fair market value of the property as of the date of valuation less the fair market value of the remainder interest on that date determined under § 1.664–4(e)(4) and (5) of this chapter.

(ii) *Ordinary remainder and reversionary interests.* If the interest to be valued is to take effect after a definite number of years or after the death of one individual, the present value of the interest is computed by multiplying the value of the property by the appropriate remainder interest actuarial factor (that corresponds to the applicable section 7520 interest rate and remainder interest period) in Table B (for a term certain) or the appropriate Table S (for one measuring life), as the case may be. Table B is contained in paragraph (d)(6) of this section and Table S (for one measuring life when the valuation date is after April 30, 1999) is contained in paragraph (d)(7) of this section and in Internal Revenue Service Publication 1457. For information about obtaining actuarial factors for other types of remainder interests, see paragraph (d)(4) of this section.

(iii) *Ordinary term-of-years and life interests.* If the interest to be valued is the right of a person to receive the income of certain property, or to use certain nonincome-producing property, for

a term of years or for the life of one individual, the present value of the interest is computed by multiplying the value of the property by the appropriate term-of-years or life interest actuarial factor (that corresponds to the applicable section 7520 interest rate and term-of-years or life interest period). Internal Revenue Service Publication 1457 includes actuarial factors for an interest for a term of years in Table B and for the life of one individual in Table S (for one measuring life when the valuation date is after April 30, 1999). However, term-of-years and life interest actuarial factors are not included in Table B in paragraph (d)(6) of this section or Table S in paragraph (d)(7) of this section. If Internal Revenue Service Publication 1457 (or any other reliable source of term-of-years and life interest actuarial factors) is not conveniently available, an actuarial factor for the interest may be derived mathematically. This actuarial factor may be derived by subtracting the correlative remainder factor (that corresponds to the applicable section 7520 interest rate and the term of years or the life) in Table B (for a term of years) in paragraph (d)(6) of this section or in Table S (for the life of one individual) in paragraph (d)(7) of this section, as the case may be, from 1.000000. For information about obtaining actuarial factors for other types of term-of-years and life interests, see paragraph (d)(4) of this section.

(iv) *Annuities.* (A) If the interest to be valued is the right of a person to receive an annuity that is payable at the end of each year for a term of years or for the life of one individual, the present value of the interest is computed by multiplying the aggregate amount payable annually by the appropriate annuity actuarial factor (that corresponds to the applicable section 7520 interest rate and annuity period). Internal Revenue Service Publication 1457 includes actuarial factors in Table B (for an annuity payable for a term of years) and in Table S (for an annuity payable for the life of one individual when the valuation date is after April 30, 1999). However, annuity actuarial factors are not included in Table B in paragraph (d)(6) of this section or Table S in paragraph (d)(7) of this section. If Internal

Revenue Service Publication 1457 (or any other reliable source of annuity actuarial factors) is not conveniently available, a required annuity factor for a term of years or for one life may be mathematically derived. This annuity factor may be derived by subtracting the applicable remainder factor (that corresponds to the applicable section 7520 interest rate and annuity period) in Table B (in the case of a term-of-years annuity) in paragraph (d)(6) of this section or in Table S (in the case of a one-life annuity when the valuation date is after April 30, 1999) in paragraph (d)(7) of this section, as the case may be, from 1.000000 and then dividing the result by the applicable section 7520 interest rate expressed as a decimal number.

(B) If the annuity is payable at the end of semiannual, quarterly, monthly, or weekly periods, the product obtained by multiplying the annuity factor by the aggregate amount payable annually is then multiplied by the applicable adjustment factor as contained in Table K in paragraph (d)(6) of this section for payments made at the end of the specified periods. The provisions of this paragraph (d)(2)(iv)(B) are illustrated by the following example:

Example. At the time of the decedent's death, the survivor/annuitant, age 72, is entitled to receive an annuity of $15,000 a year for life payable in equal monthly installments at the end of each period. The section 7520 rate for the month in which the decedent died is 9.6 percent. Under Table S in paragraph (d)(7) of this section, the remainder factor at 9.6 percent for an individual aged 72 is .38438. By converting the remainder factor to an annuity factor, as described above, the annuity factor at 9.6 percent for an individual aged 72 is 6.4127 (1.00000 minus .38438, divided by .096). Under Table K in paragraph (d)(6) of this section, the adjustment factor under the column for payments made at the end of each monthly period at the rate of 9.6 percent is 1.0433. The aggregate annual amount, $15,000, is multiplied by the factor 6.4127 and the product multiplied by 1.0433. The present value of the annuity at the date of the decedent's death is, therefore, $100,355.55 ($15,000 × 6.4127 × 1.0433).

(C) If an annuity is payable at the beginning of annual, semiannual, quarterly, monthly, or weekly periods for a term of years, the value of the annuity is computed by multiplying the aggregate amount payable annually by the

annuity factor described in paragraph (d)(2)(iv)(A) of this section; and the product so obtained is then multiplied by the adjustment factor in Table J in paragraph (d)(6) of this section at the appropriate interest rate component for payments made at the beginning of specified periods. If an annuity is payable at the beginning of annual, semiannual, quarterly, monthly, or weekly periods for one or more lives, the value of the annuity is the sum of the first payment plus the present value of a similar annuity, the first payment of which is not to be made until the end of the payment period, determined as provided in this paragraph (d)(2)(iv).

(v) *Annuity and unitrust interests for a term of years or until the prior death of an individual.* See § 25.2512–5(d)(2)(v) of this chapter for examples explaining how to compute the present value of an annuity or unitrust interest that is payable until the earlier of the lapse of a specific number of years or the death of an individual.

(3) *Transitional rule.* (i) If a decedent dies after April 30, 1999, and if on May 1, 1999, the decedent was mentally incompetent so that the disposition of the decedent's property could not be changed, and the decedent dies without having regained competency to dispose of the decedent's property or dies within 90 days of the date on which the decedent first regains competency, the fair market value of annuities, life estates, terms for years, remainders, and reversions included in the gross estate of the decedent is their present value determined either under this section or under the corresponding section applicable at the time the decedent became mentally incompetent, at the option of the decedent's executor. For example, see § 20.2031–7A(e)(2).

(ii) If a decedent dies after April 30, 1999, and before July 1, 1999, the fair market value of annuities, life estates, remainders, and reversions based on one or more measuring lives included in the gross estate of the decedent is their present value determined under this section by use of the section 7520 interest rate for the month in which the valuation date occurs (see §§ 20.7520–1(b) and 20.7520–2(a)(2)) and the appropriate actuarial tables under either paragraph (d)(7) of this section or § 20.2031–7A(e)(4), at the option of the decedent's executor.

(iii) For purposes of paragraphs (d)(3)(i) and (ii) of this section, where the decedent's executor is given the option to use the appropriate actuarial tables under either paragraph (d)(7) of this section or § 20.2031–7A(e)(4), the decedent's executor must use the same actuarial table with respect to each individual transaction and with respect to all transfers occurring on the valuation date (for example, gift and income tax charitable deductions with respect to the same transfer must be determined based on the same tables, and all assets includible in the gross estate and/or estate tax deductions claimed must be valued based on the same tables).

(4) *Publications and actuarial computations by the Internal Revenue Service.* Many standard actuarial factors not included in paragraphs (d)(6) or (d)(7) of this section are included in Internal Revenue Service Publication 1457, ''Actuarial Values, Book Aleph,'' (7–1999). Publication 1457 also includes examples that illustrate how to compute many special factors for more unusual situations. A copy of this publication is available for purchase from the Superintendent of Documents, United States Government Printing Office, Washington, DC 20402. See § 20.2031–7A for publications containing actuarial factors for valuing interests for which the valuation date is before May 1, 1999. If a special factor is required in the case of an actual decedent, the Internal Revenue Service may furnish the factor to the executor upon a request for a ruling. The request for a ruling must be accompanied by a recitation of the facts including a statement of the date of birth for each measuring life, the date of the decedent's death, any other applicable dates, and a copy of the will, trust, or other relevant documents. A request for a ruling must comply with the instructions for requesting a ruling published periodically in the Internal Revenue Bulletin (see §§ 601.201 and 601.601(d)(2)(ii)(*b*) of this chapter) and include payment of the required user fee.

(5) *Examples.* The provisions of this section are illustrated by the following examples:

Example 1. Remainder payable at an individual's death. The decedent, or the decedent's estate, was entitled to receive certain property worth $50,000 upon the death of A, to whom the income was bequeathed for life. At the time of the decedent's death, A was 47 years 5 months old. In the month in which the decedent died, the section 7520 rate was 9.8 percent. Under Table S in paragraph (d)(7) of this section, the remainder factor at 9.8 percent for determining the present value of the remainder interest due at the death of a person aged 47, the number of years nearest A's actual age at the decedent's death, is .10317. The present value of the remainder interest at the date of the decedent's death is, therefore, $5,158.50 ($50,000 × .10317).

Example 2. Income payable for an individual's life. A's parent bequeathed an income interest in property to A for life, with the remainder interest passing to B at A's death. At the time of the parent's death, the value of the property was $50,000 and A was 30 years 10 months old. The section 7520 rate at the time of the parent's death was 10.2 percent. Under Table S in paragraph (d)(7) of this section, the remainder factor at 10.2 percent for determining the present value of the remainder interest due at the death of a person aged 31, the number of years closest to A's age at the decedent's death, is .03583. Converting this remainder factor to an income factor, as described in paragraph (d)(2)(iii) of this section, the factor for determining the present value of an income interest for the life of a person aged 31 is .96417. The present value of A's interest at the time of the parent's death is, therefore, $48,208.50 ($50,000 × .96417).

Example 3. Annuity payable for an individual's life. A purchased an annuity for the benefit of both A and B. Under the terms of the annuity contract, at A's death, a survivor annuity of $10,000 a year payable in equal semiannual installments made at the end of each interval is payable to B for life. At A's death, B was 45 years 7 months old. Also, at A's death, the section 7520 rate was 9.6 percent. Under Table S in paragraph (d)(7) of this section, the factor at 9.6 percent for determining the present value of the remainder interest at the death of a person age 46 (the number of years nearest B's actual age) is

.10013. By converting the factor to an annuity factor, as described in paragraph (d)(2)(iv)(A) of this section, the factor for the present value of an annuity payable until the death of a person age 46 is 9.3736 (1.00000 minus .10013, divided by .096). The adjustment factor from Table K in paragraph (d)(6) of this section at an interest rate of 9.6 percent for semiannual annuity payments made at the end of the period is 1.0235. The present value of the annuity at the date of A's death is, therefore, $95,938.80 ($10,000 × 9.3736 × 1.0235).

Example 4. Annuity payable for a term of years. The decedent, or the decedent's estate, was entitled to receive an annuity of $10,000 a year payable in equal quarterly installments at the end of each quarter throughout a term certain. At the time of the decedent's death, the section 7520 rate was 9.8 percent. A quarterly payment had just been made prior to the decedent's death and payments were to continue for 5 more years. Under Table B in paragraph (d)(6) of this section for the interest rate of 9.8 percent, the factor for the present value of a remainder interest due after a term of 5 years is .626597. Converting the factor to an annuity factor, as described in paragraph (d)(2)(iv)(A) of this section, the factor for the present value of an annuity for a term of 5 years is 3.8102. The adjustment factor from Table K in paragraph (d)(6) of this section at an interest rate of 9.8 percent for quarterly annuity payments made at the end of the period is 1.0360. The present value of the annuity is, therefore, $39,473.67 ($10,000 × 3.8102 × 1.0360).

(6) *Actuarial Table B, Table J, and Table K where the valuation date is after April 30, 1989.* Except as provided in § 20.7520–3(b) (pertaining to certain limitations on prescribed tables), for determination of the present value of an interest that is dependent on a term of years, the tables in this paragraph (d)(6) must be used in the application of the provisions of this section when the section 7520 interest rate component is between 4.2 and 14 percent.

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989

Years	Interest rate									
	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%
1	.959693	.957854	.956023	.954198	.952381	.950570	.948767	.946970	.945180	.943396
2	.921010	.917485	.913980	.910495	.907029	.903584	.900158	.896752	.893364	.889996
3	.883887	.878817	.873786	.868793	.863838	.858920	.854040	.849197	.844390	.839619
4	.848260	.841779	.835359	.829001	.822702	.816464	.810285	.804163	.798100	.792094
5	.814069	.806302	.798623	.791031	.783526	.776106	.768771	.761518	.754348	.747258
6	.781257	.772320	.763501	.754801	.746215	.737744	.729384	.721135	.712994	.704961
7	.749766	.739770	.729925	.720230	.710681	.701277	.692015	.682893	.673908	.665057
8	.719545	.708592	.697825	.687242	.676839	.666613	.656561	.646679	.636964	.627412
9	.690543	.678728	.667137	.655765	.644609	.633663	.622923	.612385	.602045	.591898
10	.662709	.650122	.637798	.625730	.613913	.602341	.591009	.579910	.569041	.558395

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989—Continued

Years	Interest rate									
	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%
11	.635997	.622722	.609750	.597071	.584679	.572568	.560729	.549157	.537846	.526788
12	.610362	.596477	.582935	.569724	.556837	.544266	.532001	.520035	.508361	.496969
13	.585760	.571339	.557299	.543630	.530321	.517363	.504745	.492458	.480492	.468839
14	.562150	.547259	.532790	.518731	.505068	.491790	.478885	.466343	.454151	.442301
15	.539491	.524195	.509360	.494972	.481017	.467481	.454350	.441612	.429255	.417265
16	.517746	.502102	.486960	.472302	.458112	.444374	.431072	.418194	.405723	.393646
17	.496877	.480941	.465545	.450670	.436297	.422408	.408987	.396017	.383481	.371364
18	.476849	.460671	.445071	.430028	.415521	.401529	.388033	.375016	.362458	.350344
19	.457629	.441256	.425498	.410332	.395734	.381681	.368153	.355129	.342588	.330513
20	.439183	.422659	.406786	.391538	.376889	.362815	.349291	.336296	.323807	.311805
21	.421481	.404846	.388897	.373605	.358942	.344881	.331396	.318462	.306056	.294155
22	.404492	.387783	.371794	.356494	.341850	.327834	.314417	.301574	.289278	.277505
23	.388188	.371440	.355444	.340166	.325571	.311629	.298309	.285581	.273420	.261797
24	.372542	.355785	.339813	.324586	.310068	.296225	.283025	.270437	.258431	.246979
25	.357526	.340791	.324869	.309719	.295303	.281583	.268525	.256096	.244263	.232999
26	.343115	.326428	.310582	.295533	.281241	.267664	.254768	.242515	.230873	.219810
27	.329285	.312670	.296923	.281998	.267848	.254434	.241715	.229654	.218216	.207368
28	.316012	.299493	.283866	.269082	.255094	.241857	.229331	.217475	.206253	.195630
29	.303275	.286870	.271382	.256757	.242946	.229902	.217582	.205943	.194947	.184557
30	.291051	.274780	.259447	.244997	.231377	.218538	.206434	.195021	.184260	.174110
31	.279319	.263199	.248038	.233776	.220359	.207736	.195858	.184679	.174158	.164255
32	.268061	.252106	.237130	.223069	.209866	.197468	.185823	.174886	.164611	.154957
33	.257256	.241481	.226702	.212852	.199873	.187707	.176303	.165612	.155587	.146186
34	.246887	.231304	.216732	.203103	.190355	.178429	.167270	.156829	.147058	.137912
35	.236935	.221556	.207201	.193801	.181290	.169609	.158701	.148512	.138996	.130105
36	.227385	.212218	.198089	.184924	.172657	.161225	.150570	.140637	.131376	.122741
37	.218220	.203274	.189377	.176454	.164436	.153256	.142856	.133179	.124174	.115793
38	.209424	.194707	.181049	.168373	.156605	.145681	.135537	.126116	.117367	.109239
39	.200983	.186501	.173087	.160661	.149148	.138480	.128593	.119428	.110933	.103056
40	.192882	.178641	.165475	.153302	.142046	.131635	.122004	.113095	.104851	.097222
41	.185107	.171112	.158198	.146281	.135282	.125128	.115754	.107098	.099103	.091719
42	.177646	.163900	.151241	.139581	.128840	.118943	.109823	.101418	.093670	.086527
43	.170486	.156992	.144590	.133188	.122704	.113064	.104197	.096040	.088535	.081630
44	.163614	.150376	.138231	.127088	.116861	.107475	.098858	.090947	.083682	.077009
45	.157019	.144038	.132152	.121267	.111297	.102163	.093793	.086124	.079094	.072650
46	.150690	.137968	.126340	.115713	.105997	.097113	.088988	.081557	.074758	.068538
47	.144616	.132153	.120784	.110413	.100949	.092312	.084429	.077232	.070660	.064658
48	.138787	.126583	.115473	.105356	.096142	.087749	.080103	.073136	.066786	.060998
49	.133193	.121248	.110395	.100530	.091564	.083412	.075999	.069258	.063125	.057546
50	.127824	.116138	.105540	.095926	.087204	.079289	.072106	.065585	.059665	.054288
51	.122672	.111243	.100898	.091532	.083051	.075370	.068411	.062107	.056394	.051215
52	.117728	.106555	.096461	.087340	.079096	.071644	.064907	.058813	.053302	.048316
53	.112982	.102064	.092219	.083340	.075330	.068103	.061581	.055695	.050380	.045582
54	.108428	.097763	.088164	.079523	.071743	.064737	.058426	.052741	.047618	.043001
55	.104058	.093642	.084286	.075880	.068326	.061537	.055433	.049944	.045008	.040567
56	.099864	.089696	.080580	.072405	.065073	.058495	.052593	.047296	.042541	.038271
57	.095839	.085916	.077036	.069089	.061974	.055604	.049898	.044787	.040208	.036105
58	.091976	.082295	.073648	.065924	.059023	.052855	.047342	.042412	.038004	.034061
59	.088268	.078826	.070409	.062905	.056212	.050243	.044916	.040163	.035921	.032133
60	.084710	.075504	.067313	.060024	.053536	.047759	.042615	.038033	.033952	.030314

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989

Years	Interest rate									
	6.2%	6.4%	6.6%	6.8%	7.0%	7.2%	7.4%	7.6%	7.8%	8.0%
1	.941620	.939850	.938086	.936330	.934579	.932836	.931099	.929368	.927644	.925926
2	.886647	.883317	.880006	.876713	.873439	.870183	.866945	.863725	.860523	.857339
3	.834885	.830185	.825521	.820892	.816298	.811738	.807211	.802718	.798259	.793832
4	.786144	.780249	.774410	.768626	.762895	.757218	.751593	.746021	.740500	.735030
5	.740248	.733317	.726464	.719687	.712986	.706360	.699808	.693328	.686920	.680583
6	.697032	.689208	.681486	.673864	.666342	.658918	.651590	.644357	.637217	.630170
7	.656339	.647752	.639292	.630959	.622750	.614662	.606694	.598845	.591111	.583490
8	.618022	.608789	.599711	.590786	.582009	.573379	.564892	.556547	.548340	.540269
9	.581942	.572170	.562581	.553170	.543934	.534868	.525971	.517237	.508664	.500249
10	.547968	.537754	.527750	.517950	.508349	.498944	.489731	.480704	.471859	.463193
11	.515977	.505408	.495075	.484972	.475093	.465433	.455987	.446750	.437717	.428883
12	.485854	.475007	.464423	.454093	.444012	.434173	.424569	.415196	.406046	.397114
13	.457490	.446436	.435669	.425181	.414964	.405012	.395316	.385870	.376666	.367698

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989—Continued

Years	Interest rate									
	6.2%	6.4%	6.6%	6.8%	7.0%	7.2%	7.4%	7.6%	7.8%	8.0%
14	.430781	.419582	.408695	.398109	.387817	.377810	.368078	.358615	.349412	.340461
15	.405632	.394344	.383391	.372762	.362446	.352434	.342717	.333285	.324130	.315242
16	.381951	.370624	.359654	.349028	.338735	.328763	.319103	.309745	.300677	.291890
17	.359653	.348331	.337386	.326805	.316574	.306682	.297117	.287867	.278921	.270269
18	.338656	.327379	.316498	.305997	.295864	.286084	.276645	.267534	.258739	.250249
19	.318885	.307687	.296902	.286514	.276508	.266870	.257584	.248638	.240018	.231712
20	.300268	.289179	.278520	.268272	.258419	.248946	.239836	.231076	.222651	.214548
21	.282739	.271785	.261276	.251191	.241513	.232225	.223311	.214755	.206541	.198656
22	.266232	.255437	.245099	.235197	.225713	.216628	.207925	.199586	.191596	.183941
23	.250689	.240073	.229924	.220222	.210947	.202078	.193598	.185489	.177733	.170315
24	.236054	.225632	.215689	.206201	.197147	.188506	.180259	.172387	.164873	.157699
25	.222273	.212060	.202334	.193072	.184249	.175845	.167839	.160211	.152943	.146018
26	.209297	.199305	.189807	.180779	.172195	.164035	.156275	.148895	.141877	.135202
27	.197078	.187317	.178056	.169269	.160930	.153017	.145507	.138379	.131611	.125187
28	.185572	.176049	.167031	.158491	.150402	.142740	.135482	.128605	.122088	.115914
29	.174739	.165460	.156690	.148400	.140563	.133153	.126147	.119521	.113255	.107328
30	.164537	.155507	.146989	.138951	.131367	.124210	.117455	.111079	.105060	.099377
31	.154932	.146154	.137888	.130104	.122773	.115868	.109362	.103233	.097458	.092016
32	.145887	.137362	.129351	.121820	.114741	.108085	.101827	.095942	.090406	.085200
33	.137370	.129100	.121342	.114064	.107235	.100826	.094811	.089165	.083865	.078889
34	.129350	.121335	.113830	.106802	.100219	.094054	.088278	.082867	.077797	.073045
35	.121798	.114036	.106782	.100001	.093663	.087737	.082196	.077014	.072168	.067635
36	.114688	.107177	.100171	.093634	.087535	.081844	.076532	.071574	.066946	.062625
37	.107992	.100730	.093969	.087673	.081809	.076347	.071259	.066519	.062102	.057986
38	.101688	.094671	.088151	.082090	.076457	.071219	.066349	.061821	.057609	.053690
39	.095751	.088977	.082693	.076864	.071455	.066436	.061778	.057454	.053440	.049713
40	.090161	.083625	.077573	.071970	.066780	.061974	.057521	.053396	.049573	.046031
41	.084897	.078595	.072770	.067387	.062412	.057811	.053558	.049625	.045987	.042621
42	.079941	.073867	.068265	.063097	.058329	.053929	.049868	.046120	.042659	.039464
43	.075274	.069424	.064038	.059079	.054513	.050307	.046432	.042862	.039572	.036541
44	.070880	.065248	.060074	.055318	.050946	.046928	.043233	.039835	.036709	.033834
45	.066742	.061323	.056354	.051796	.047613	.043776	.040254	.037021	.034053	.031328
46	.062845	.057635	.052865	.048498	.044499	.040836	.037480	.034406	.031589	.029007
47	.059176	.054168	.049592	.045410	.041587	.038093	.034898	.031976	.029303	.026859
48	.055722	.050910	.046522	.042519	.038867	.035535	.032493	.029717	.027183	.024869
49	.052469	.047848	.043641	.039812	.036324	.033148	.030255	.027618	.025216	.023027
50	.049405	.044970	.040939	.037277	.033948	.030922	.028170	.025668	.023392	.021321
51	.046521	.042265	.038405	.034903	.031727	.028845	.026229	.023855	.021699	.019742
52	.043805	.039722	.036027	.032681	.029651	.026907	.024422	.022170	.020129	.018280
53	.041248	.037333	.033796	.030600	.027711	.025100	.022739	.020604	.018673	.016925
54	.038840	.035087	.031704	.028652	.025899	.023414	.021172	.019149	.017322	.015672
55	.036572	.032977	.029741	.026828	.024204	.021842	.019714	.017796	.016068	.014511
56	.034437	.030993	.027900	.025119	.022621	.020375	.018355	.016539	.014906	.013436
57	.032427	.029129	.026172	.023520	.021141	.019006	.017091	.015371	.013827	.012441
58	.030534	.027377	.024552	.022023	.019758	.017730	.015913	.014285	.012827	.011519
59	.028751	.025730	.023032	.020620	.018465	.016539	.014817	.013276	.011899	.010666
60	.027073	.024183	.021606	.019307	.017257	.015428	.013796	.012339	.011038	.009876

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989

Years	Interest rate									
	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
1	.924214	.922509	.920810	.919118	.917431	.915751	.914077	.912409	.910747	.909091
2	.854172	.851023	.847892	.844777	.841680	.838600	.835536	.832490	.829460	.826446
3	.789438	.785077	.780747	.776450	.772183	.767948	.763744	.759571	.755428	.751315
4	.729610	.724241	.718920	.713649	.708425	.703250	.698121	.693039	.688003	.683013
5	.674316	.668119	.661989	.655927	.649931	.644001	.638136	.632335	.626597	.620921
6	.623213	.616346	.609566	.602874	.596267	.589745	.583305	.576948	.570671	.564474
7	.575982	.568585	.561295	.554112	.547034	.540059	.533186	.526412	.519737	.513158
8	.532331	.524524	.516846	.509294	.501866	.494560	.487373	.480303	.473349	.466507
9	.491988	.483879	.475917	.468101	.460428	.452894	.445496	.438233	.431101	.424098
10	.454703	.446383	.438230	.430240	.422411	.414738	.407218	.399848	.392624	.385543
11	.420243	.411792	.403526	.395441	.387533	.379797	.372228	.364824	.357581	.350494
12	.388394	.379882	.371571	.363457	.355535	.347799	.340245	.332869	.325666	.318631
13	.358960	.350445	.342147	.334060	.326179	.318497	.311010	.303713	.296599	.289664
14	.331756	.323288	.315052	.307040	.299246	.291664	.284287	.277110	.270127	.263331
15	.306613	.298236	.290103	.282206	.274538	.267092	.259860	.252838	.246017	.239392
16	.283376	.275126	.267130	.259381	.251870	.244589	.237532	.230691	.224059	.217629

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989—Continued

Years	Interest rate									
	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
17	.261901	.253806	.245976	.238401	.231073	.223983	.217123	.210485	.204061	.197845
18	.242052	.234139	.226497	.219119	.211994	.205113	.198467	.192048	.185848	.179859
19	.223708	.215995	.208561	.201396	.194490	.187832	.181414	.175226	.169260	.163508
20	.206754	.199257	.192045	.185107	.178431	.172007	.165826	.159878	.154153	.148644
21	.191085	.183817	.176837	.170135	.163698	.157516	.151578	.145874	.140395	.135131
22	.176604	.169573	.162834	.156374	.150182	.144245	.138554	.133097	.127864	.122846
23	.163220	.156432	.149939	.143726	.137781	.132093	.126649	.121439	.116452	.111678
24	.150850	.144310	.138065	.132101	.126405	.120964	.115767	.110802	.106058	.101526
25	.139418	.133128	.127132	.121416	.115968	.110773	.105820	.101097	.096592	.092296
26	.128852	.122811	.117064	.111596	.106393	.101441	.096727	.092241	.087971	.083905
27	.119087	.113295	.107794	.102570	.097608	.092894	.088416	.084162	.080119	.076278
28	.110062	.104515	.099258	.094274	.089548	.085068	.080819	.076790	.072968	.069343
29	.101721	.096416	.091398	.086649	.082155	.077901	.073875	.070064	.066456	.063039
30	.094012	.088945	.084160	.079640	.075371	.071338	.067527	.063927	.060524	.057309
31	.086887	.082053	.077495	.073199	.069148	.065328	.061725	.058327	.055122	.052099
32	.080302	.075694	.071358	.067278	.063438	.059824	.056422	.053218	.050202	.047362
33	.074216	.069829	.065708	.061837	.058200	.054784	.051574	.048557	.045722	.043057
34	.068592	.064418	.060504	.056835	.053395	.050168	.047142	.044304	.041641	.039143
35	.063394	.059426	.055713	.052238	.048986	.045942	.043092	.040423	.037924	.035584
36	.058589	.054821	.051301	.048013	.044941	.042071	.039389	.036882	.034539	.032349
37	.054149	.050573	.047239	.044130	.041231	.038527	.036005	.033652	.031457	.029408
38	.050045	.046654	.043498	.040560	.037826	.035281	.032911	.030704	.028649	.026735
39	.046253	.043039	.040053	.037280	.034703	.032309	.030083	.028015	.026092	.024304
40	.042747	.039703	.036881	.034264	.031838	.029587	.027498	.025561	.023763	.022095
41	.039508	.036627	.033961	.031493	.029209	.027094	.025136	.023322	.021642	.020086
42	.036514	.033789	.031271	.028946	.026797	.024811	.022976	.021279	.019711	.018260
43	.033746	.031170	.028795	.026605	.024584	.022721	.021002	.019415	.017951	.016600
44	.031189	.028755	.026515	.024453	.022555	.020807	.019197	.017715	.016349	.015091
45	.028825	.026527	.024415	.022475	.020692	.019054	.017548	.016163	.014890	.013719
46	.026641	.024471	.022482	.020657	.018984	.017449	.016040	.014747	.013561	.012472
47	.024622	.022575	.020701	.018986	.017416	.015978	.014662	.013456	.012351	.011338
48	.022756	.020825	.019062	.017451	.015978	.014632	.013402	.012277	.011248	.010307
49	.021031	.019212	.017552	.016039	.014659	.013400	.012250	.011202	.010244	.009370
50	.019437	.017723	.016163	.014742	.013449	.012271	.011198	.010221	.009330	.008519
51	.017964	.016350	.014883	.013550	.012338	.011237	.010236	.009325	.008497	.007744
52	.016603	.015083	.013704	.012454	.011319	.010290	.009356	.008508	.007739	.007040
53	.015345	.013914	.012619	.011446	.010385	.009423	.008552	.007763	.007048	.006400
54	.014182	.012836	.011620	.010521	.009527	.008629	.007817	.007083	.006419	.005818
55	.013107	.011841	.010699	.009670	.008741	.007902	.007146	.006463	.005846	.005289
56	.012114	.010923	.009852	.008888	.008019	.007237	.006532	.005897	.005324	.004809
57	.011196	.010077	.009072	.008169	.007357	.006627	.005970	.005380	.004849	.004371
58	.010347	.009296	.008354	.007508	.006749	.006069	.005458	.004909	.004416	.003974
59	.009563	.008576	.007692	.006901	.006192	.005557	.004989	.004479	.004022	.003613
60	.008838	.007911	.007083	.006343	.005681	.005089	.004560	.004087	.003663	.003284

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989

Years	Interest rate									
	10.2%	10.4%	10.6%	10.8%	11.0%	11.2%	11.4%	11.6%	11.8%	12.0%
1	.907441	.905797	.904159	.902527	.900901	.899281	.897666	.896057	.894454	.892857
2	.823449	.820468	.817504	.814555	.811622	.808706	.805804	.802919	.800049	.797194
3	.747232	.743178	.739153	.735158	.731191	.727253	.723343	.719461	.715607	.711780
4	.678069	.673168	.668312	.663500	.658731	.654005	.649321	.644679	.640078	.635518
5	.615307	.609754	.604261	.598827	.593451	.588134	.582873	.577669	.572520	.567427
6	.558355	.552313	.546348	.540457	.534641	.528897	.523225	.517625	.512093	.506631
7	.506674	.500284	.493985	.487777	.481658	.475627	.469682	.463821	.458044	.452349
8	.459777	.453156	.446641	.440232	.433926	.427722	.421617	.415610	.409700	.403883
9	.417221	.410467	.403835	.397322	.390925	.384642	.378472	.372411	.366458	.360610
10	.378603	.371800	.365131	.358593	.352184	.345901	.339741	.333701	.327780	.321973
11	.343560	.336775	.330137	.323640	.317283	.311062	.304974	.299016	.293184	.287476
12	.311760	.305050	.298496	.292094	.285841	.279732	.273765	.267935	.262240	.256675
13	.282904	.276313	.269888	.263623	.257514	.251558	.245749	.240085	.234561	.229174
14	.256719	.250284	.244022	.237927	.231995	.226221	.220601	.215130	.209804	.204620
15	.232957	.226706	.220634	.214735	.209004	.203436	.198026	.192769	.187661	.182696
16	.211395	.205350	.199489	.193804	.188292	.182946	.177761	.172732	.167854	.163122
17	.191828	.186005	.180369	.174914	.169633	.164520	.159570	.154778	.150138	.145644
18	.174073	.168483	.163083	.157864	.152822	.147950	.143241	.138690	.134291	.130040
19	.157961	.152612	.147453	.142477	.137678	.133048	.128582	.124274	.120117	.116107

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989—Continued

Years	Interest rate									
	10.2%	10.4%	10.6%	10.8%	11.0%	11.2%	11.4%	11.6%	11.8%	12.0%
20	.143340	.138235	.133321	.128589	.124034	.119648	.115424	.111357	.107439	.103667
21	.130073	.125213	.120543	.116055	.111742	.107597	.103612	.099782	.096100	.092560
22	.118033	.113418	.108990	.104743	.100669	.096760	.093009	.089410	.085957	.082643
23	.107108	.102733	.098544	.094533	.090693	.087014	.083491	.080117	.076884	.073788
24	.097195	.093056	.089100	.085319	.081705	.078250	.074947	.071789	.068770	.065882
25	.088198	.084289	.080560	.077003	.073608	.070369	.067278	.064327	.061511	.058823
26	.080035	.076349	.072839	.069497	.066314	.063281	.060393	.057641	.055019	.052521
27	.072627	.069157	.065858	.062723	.059742	.056908	.054213	.051650	.049212	.046894
28	.065905	.062642	.059547	.056609	.053822	.051176	.048665	.046281	.044018	.041869
29	.059804	.056741	.053840	.051091	.048488	.046022	.043685	.041470	.039372	.037383
30	.054269	.051396	.048680	.046111	.043683	.041386	.039214	.037160	.035216	.033378
31	.049246	.046554	.044014	.041617	.039354	.037218	.035201	.033297	.031500	.029802
32	.044688	.042169	.039796	.037560	.035454	.033469	.031599	.029836	.028175	.026609
33	.040552	.038196	.035982	.033899	.031940	.030098	.028365	.026735	.025201	.023758
34	.036798	.034598	.032533	.030595	.028775	.027067	.025463	.023956	.022541	.021212
35	.033392	.031339	.029415	.027613	.025924	.024341	.022857	.021466	.020162	.018940
36	.030301	.028387	.026596	.024921	.023355	.021889	.020518	.019235	.018034	.016910
37	.027497	.025712	.024047	.022492	.021040	.019684	.018418	.017236	.016131	.015098
38	.024952	.023290	.021742	.020300	.018955	.017702	.016533	.015444	.014428	.013481
39	.022642	.021096	.019658	.018321	.017077	.015919	.014841	.013839	.012905	.012036
40	.020546	.019109	.017774	.016535	.015384	.014316	.013323	.012400	.011543	.010747
41	.018645	.017309	.016071	.014923	.013860	.012874	.011959	.011111	.010325	.009595
42	.016919	.015678	.014531	.013469	.012486	.011577	.010735	.009956	.009235	.008567
43	.015353	.014201	.013138	.012156	.011249	.010411	.009637	.008922	.008260	.007649
44	.013932	.012864	.011879	.010971	.010134	.009362	.008651	.007994	.007389	.006830
45	.012642	.011652	.010740	.009902	.009130	.008419	.007765	.007163	.006609	.006098
46	.011472	.010554	.009711	.008937	.008225	.007571	.006971	.006419	.005911	.005445
47	.010410	.009560	.008780	.008065	.007410	.006809	.006257	.005752	.005287	.004861
48	.009447	.008659	.007939	.007279	.006676	.006123	.005617	.005154	.004729	.004340
49	.008572	.007844	.007178	.006570	.006014	.005506	.005042	.004618	.004230	.003875
50	.007779	.007105	.006490	.005929	.005418	.004952	.004526	.004138	.003784	.003460
51	.007059	.006435	.005868	.005351	.004881	.004453	.004063	.003708	.003384	.003089
52	.006406	.005829	.005306	.004830	.004397	.004005	.003647	.003322	.003027	.002758
53	.005813	.005280	.004797	.004359	.003962	.003601	.003274	.002977	.002708	.002463
54	.005275	.004783	.004337	.003934	.003569	.003238	.002939	.002668	.002422	.002199
55	.004786	.004332	.003922	.003551	.003215	.002912	.002638	.002390	.002166	.001963
56	.004343	.003924	.003546	.003205	.002897	.002619	.002368	.002142	.001938	.001753
57	.003941	.003554	.003206	.002892	.002610	.002355	.002126	.001919	.001733	.001565
58	.003577	.003220	.002899	.002610	.002351	.002118	.001908	.001720	.001550	.001398
59	.003246	.002916	.002621	.002356	.002118	.001905	.001713	.001541	.001387	.001248
60	.002945	.002642	.002370	.002126	.001908	.001713	.001538	.001381	.001240	.001114

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989

Years	Interest rate									
	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%	13.4%	13.6%	13.8%	14.0%
1	.891266	.889680	.888099	.886525	.884956	.883392	.881834	.880282	.878735	.877193
2	.794354	.791530	.788721	.785926	.783147	.780382	.777632	.774896	.772175	.769468
3	.707981	.704208	.700462	.696743	.693050	.689383	.685742	.682127	.678536	.674972
4	.630999	.626520	.622080	.617680	.613319	.608996	.604711	.600464	.596254	.592080
5	.562388	.557402	.552469	.547589	.542760	.537982	.533255	.528577	.523949	.519369
6	.501237	.495909	.490648	.485451	.480319	.475249	.470242	.465297	.460412	.455587
7	.446735	.441200	.435744	.430364	.425061	.419831	.414676	.409592	.404580	.399637
8	.398160	.392527	.386984	.381529	.376160	.370876	.365675	.360557	.355518	.350559
9	.354866	.349223	.343680	.338235	.332885	.327629	.322465	.317391	.312406	.307508
10	.316280	.310697	.305222	.299853	.294588	.289425	.284361	.279394	.274522	.269744
11	.281889	.276421	.271068	.265827	.260698	.255676	.250759	.245945	.241232	.236617
12	.251238	.245926	.240735	.235663	.230706	.225862	.221128	.216501	.211979	.207559
13	.223920	.218795	.213797	.208921	.204165	.199525	.194998	.190582	.186273	.182069
14	.199572	.194658	.189873	.185213	.180677	.176258	.171956	.167766	.163685	.159710
15	.177872	.173183	.168626	.164196	.159891	.155705	.151637	.147681	.143835	.140096
16	.158531	.154077	.149757	.145564	.141496	.137549	.133718	.130001	.126393	.122892
17	.141293	.137080	.132999	.129046	.125218	.121510	.117917	.114438	.111066	.107800
18	.125930	.121957	.118116	.114403	.110812	.107341	.103984	.100737	.097598	.094561
19	.112237	.108503	.104899	.101421	.098064	.094824	.091696	.088677	.085762	.082948
20	.100033	.096533	.093161	.089912	.086782	.083767	.080861	.078061	.075362	.072762
21	.089156	.085883	.082736	.079709	.076798	.073999	.071306	.068716	.066224	.063826
22	.079462	.076408	.073478	.070664	.067963	.065370	.062880	.060489	.058193	.055988

TABLE B.—TERM CERTAIN REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1989—Continued

Years	Interest rate									
	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%	13.4%	13.6%	13.8%	14.0%
23	.070821	.067979	.065255	.062646	.060144	.057747	.055450	.053247	.051136	.049112
24	.063121	.060480	.057953	.055537	.053225	.051014	.048898	.046873	.044935	.043081
25	.056257	.053807	.051468	.049235	.047102	.045065	.043119	.041261	.039486	.037790
26	.050140	.047871	.045709	.043648	.041683	.039810	.038024	.036321	.034698	.033149
27	.044688	.042590	.040594	.038695	.036888	.035168	.033531	.031973	.030490	.029078
28	.039829	.037892	.036052	.034304	.032644	.031067	.029569	.028145	.026793	.025507
29	.035498	.033711	.032017	.030411	.028889	.027444	.026075	.024776	.023544	.022375
30	.031638	.029992	.028435	.026960	.025565	.024244	.022994	.021810	.020689	.019627
31	.028198	.026684	.025253	.023901	.022624	.021417	.020277	.019199	.018180	.017217
32	.025132	.023740	.022427	.021189	.020021	.018920	.017881	.016900	.015975	.015102
33	.022399	.021121	.019917	.018785	.017718	.016714	.015768	.014877	.014038	.013248
34	.019964	.018791	.017689	.016653	.015680	.014765	.013905	.013096	.012336	.011621
35	.017793	.016718	.015709	.014763	.013876	.013043	.012261	.011528	.010840	.010194
36	.015858	.014873	.013951	.013088	.012279	.011522	.010813	.010148	.009525	.008942
37	.014134	.013233	.012390	.011603	.010867	.010178	.009535	.008933	.008370	.007844
38	.012597	.011773	.011004	.010286	.009617	.008992	.008408	.007864	.007355	.006880
39	.011227	.010474	.009772	.009119	.008510	.007943	.007415	.006922	.006463	.006035
40	.010007	.009319	.008679	.008084	.007531	.007017	.006538	.006093	.005679	.005294
41	.008919	.008291	.007708	.007167	.006665	.006199	.005766	.005364	.004991	.004644
42	.007949	.007376	.006845	.006354	.005898	.005476	.005085	.004722	.004386	.004074
43	.007084	.006562	.006079	.005633	.005219	.004837	.004484	.004157	.003854	.003573
44	.006314	.005838	.005399	.004993	.004619	.004273	.003954	.003659	.003386	.003135
45	.005628	.005194	.004795	.004427	.004088	.003775	.003487	.003221	.002976	.002750
46	.005016	.004621	.004258	.003924	.003617	.003335	.003075	.002835	.002615	.002412
47	.004470	.004111	.003782	.003479	.003201	.002946	.002711	.002496	.002298	.002116
48	.003984	.003658	.003359	.003084	.002833	.002602	.002391	.002197	.002019	.001856
49	.003551	.003254	.002983	.002734	.002507	.002299	.002108	.001934	.001774	.001628
50	.003165	.002895	.002649	.002424	.002219	.002031	.001859	.001702	.001559	.001428
51	.002821	.002576	.002353	.002149	.001963	.001794	.001640	.001499	.001370	.001253
52	.002514	.002292	.002089	.001905	.001737	.001585	.001446	.001319	.001204	.001099
53	.002241	.002039	.001856	.001689	.001538	.001400	.001275	.001161	.001058	.000964
54	.001997	.001814	.001648	.001497	.001361	.001237	.001124	.001022	.000930	.000846
55	.001780	.001614	.001463	.001327	.001204	.001093	.000991	.000900	.000817	.000742
56	.001586	.001436	.001300	.001177	.001066	.000965	.000874	.000792	.000718	.000651
57	.001414	.001277	.001154	.001043	.000943	.000853	.000771	.000697	.000631	.000571
58	.001260	.001136	.001025	.000925	.000835	.000753	.000680	.000614	.000554	.000501
59	.001123	.001011	.000910	.000820	.000739	.000665	.000600	.000540	.000487	.000439
60	.001001	.000900	.000809	.000727	.000654	.000588	.000529	.000476	.000428	.000385

TABLE J.—ADJUSTMENT FACTORS FOR TERM CERTAIN ANNUITIES PAYABLE AT THE BEGINNING OF EACH INTERVAL APPLICABLE AFTER APRIL 30, 1989

[Frequency of payments]

Interest rate	Annually	Semi annually	Quarterly	Monthly	Weekly
4.2	1.0420	1.0314	1.0261	1.0226	1.0213
4.4	1.0440	1.0329	1.0274	1.0237	1.0223
4.6	1.0460	1.0344	1.0286	1.0247	1.0233
4.8	1.0480	1.0359	1.0298	1.0258	1.0243
5.0	1.0500	1.0373	1.0311	1.0269	1.0253
5.2	1.0520	1.0388	1.0323	1.0279	1.0263
5.4	1.0540	1.0403	1.0335	1.0290	1.0273
5.6	1.0560	1.0418	1.0348	1.0301	1.0283
5.8	1.0580	1.0433	1.0360	1.0311	1.0293
6.0	1.0600	1.0448	1.0372	1.0322	1.0303
6.2	1.0620	1.0463	1.0385	1.0333	1.0313
6.4	1.0640	1.0478	1.0397	1.0343	1.0323
6.6	1.0660	1.0492	1.0409	1.0354	1.0333
6.8	1.0680	1.0507	1.0422	1.0365	1.0343
7.0	1.0700	1.0522	1.0434	1.0375	1.0353
7.2	1.0720	1.0537	1.0446	1.0386	1.0363
7.4	1.0740	1.0552	1.0458	1.0396	1.0373
7.6	1.0760	1.0567	1.0471	1.0407	1.0383
7.8	1.0780	1.0581	1.0483	1.0418	1.0393
8.0	1.0800	1.0596	1.0495	1.0428	1.0403
8.2	1.0820	1.0611	1.0507	1.0439	1.0413
8.4	1.0840	1.0626	1.0520	1.0449	1.0422
8.6	1.0860	1.0641	1.0532	1.0460	1.0432

TABLE J.—ADJUSTMENT FACTORS FOR TERM CERTAIN ANNUITIES PAYABLE AT THE BEGINNING OF EACH INTERVAL APPLICABLE AFTER APRIL 30, 1989—Continued

[Frequency of payments]

Interest rate	Annually	Semi annually	Quarterly	Monthly	Weekly
8.8	1.0880	1.0655	1.0544	1.0471	1.0442
9.0	1.0900	1.0670	1.0556	1.0481	1.0452
9.2	1.0920	1.0685	1.0569	1.0492	1.0462
9.4	1.0940	1.0700	1.0581	1.0502	1.0472
9.6	1.0960	1.0715	1.0593	1.0513	1.0482
9.8	1.0980	1.0729	1.0605	1.0523	1.0492
10.0	1.1000	1.0744	1.0618	1.0534	1.0502
10.2	1.1020	1.0759	1.0630	1.0544	1.0512
10.4	1.1040	1.0774	1.0642	1.0555	1.0521
10.6	1.1060	1.0788	1.0654	1.0565	1.0531
10.8	1.1080	1.0803	1.0666	1.0576	1.0541
11.0	1.1100	1.0818	1.0679	1.0586	1.0551
11.2	1.1120	1.0833	1.0691	1.0597	1.0561
11.4	1.1140	1.0847	1.0703	1.0607	1.0571
11.6	1.1160	1.0862	1.0715	1.0618	1.0581
11.8	1.1180	1.0877	1.0727	1.0628	1.0590
12.0	1.1200	1.0892	1.0739	1.0639	1.0600
12.2	1.1220	1.0906	1.0752	1.0649	1.0610
12.4	1.1240	1.0921	1.0764	1.0660	1.0620
12.6	1.1260	1.0936	1.0776	1.0670	1.0630
12.8	1.1280	1.0950	1.0788	1.0681	1.0639
13.0	1.1300	1.0965	1.0800	1.0691	1.0649
13.2	1.1320	1.0980	1.0812	1.0701	1.0659
13.4	1.1340	1.0994	1.0824	1.0712	1.0669
13.6	1.1360	1.1009	1.0836	1.0722	1.0679
13.8	1.1380	1.1024	1.0849	1.0733	1.0688
14.0	1.1400	1.1039	1.0861	1.0743	1.0698

TABLE K.—ADJUSTMENT FACTORS FOR ANNUITIES PAYABLE AT THE END OF EACH INTERVAL APPLICABLE AFTER APRIL 30, 1989

[Frequency of Payments]

Interest Rate	Annually	Semi annually	Quarterly	Monthly	Weekly
4.2	1.0000	1.0104	1.0156	1.0191	1.0205
4.4	1.0000	1.0109	1.0164	1.0200	1.0214
4.6	1.0000	1.0114	1.0171	1.0209	1.0224
4.8	1.0000	1.0119	1.0178	1.0218	1.0234
5.0	1.0000	1.0123	1.0186	1.0227	1.0243
5.2	1.0000	1.0128	1.0193	1.0236	1.0253
5.4	1.0000	1.0133	1.0200	1.0245	1.0262
5.6	1.0000	1.0138	1.0208	1.0254	1.0272
5.8	1.0000	1.0143	1.0215	1.0263	1.0282
6.0	1.0000	1.0148	1.0222	1.0272	1.0291
6.2	1.0000	1.0153	1.0230	1.0281	1.0301
6.4	1.0000	1.0158	1.0237	1.0290	1.0311
6.6	1.0000	1.0162	1.0244	1.0299	1.0320
6.8	1.0000	1.0167	1.0252	1.0308	1.0330
7.0	1.0000	1.0172	1.0259	1.0317	1.0339
7.2	1.0000	1.0177	1.0266	1.0326	1.0349
7.4	1.0000	1.0182	1.0273	1.0335	1.0358
7.6	1.0000	1.0187	1.0281	1.0344	1.0368
7.8	1.0000	1.0191	1.0288	1.0353	1.0378
8.0	1.0000	1.0196	1.0295	1.0362	1.0387
8.2	1.0000	1.0201	1.0302	1.0370	1.0397
8.4	1.0000	1.0206	1.0310	1.0379	1.0406
8.6	1.0000	1.0211	1.0317	1.0388	1.0416
8.8	1.0000	1.0215	1.0324	1.0397	1.0425
9.0	1.0000	1.0220	1.0331	1.0406	1.0435
9.2	1.0000	1.0225	1.0339	1.0415	1.0444
9.4	1.0000	1.0230	1.0346	1.0424	1.0454
9.6	1.0000	1.0235	1.0353	1.0433	1.0463
9.8	1.0000	1.0239	1.0360	1.0442	1.0473
10.0	1.0000	1.0244	1.0368	1.0450	1.0482
10.2	1.0000	1.0249	1.0375	1.0459	1.0492
10.4	1.0000	1.0254	1.0382	1.0468	1.0501

TABLE K.—ADJUSTMENT FACTORS FOR ANNUITIES PAYABLE AT THE END OF EACH INTERVAL APPLICABLE AFTER APRIL 30, 1989—Continued

[Frequency of Payments]

Interest Rate	Annually	Semi annually	Quarterly	Monthly	Weekly
10.6	1.0000	1.0258	1.0389	1.0477	1.0511
10.8	1.0000	1.0263	1.0396	1.0486	1.0520
11.0	1.0000	1.0268	1.0404	1.0495	1.0530
11.2	1.0000	1.0273	1.0411	1.0503	1.0539
11.4	1.0000	1.0277	1.0418	1.0512	1.0549
11.6	1.0000	1.0282	1.0425	1.0521	1.0558
11.8	1.0000	1.0287	1.0432	1.0530	1.0568
12.0	1.0000	1.0292	1.0439	1.0539	1.0577
12.2	1.0000	1.0296	1.0447	1.0548	1.0587
12.4	1.0000	1.0301	1.0454	1.0556	1.0596
12.6	1.0000	1.0306	1.0461	1.0565	1.0605
12.8	1.0000	1.0310	1.0468	1.0574	1.0615
13.0	1.0000	1.0315	1.0475	1.0583	1.0624
13.2	1.0000	1.0320	1.0482	1.0591	1.0634
13.4	1.0000	1.0324	1.0489	1.0600	1.0643
13.6	1.0000	1.0329	1.0496	1.0609	1.0652
13.8	1.0000	1.0334	1.0504	1.0618	1.0662
14.0	1.0000	1.0339	1.0511	1.0626	1.0671

(7) *Actuarial Table S and Table 90CM where the valuation date is after April 30, 1999.* Except as provided in § 20.7520–2(b) (pertaining to certain limitations on the use of prescribed tables), for determination of the present value of an interest that is dependent on the termination of a life interest, Table 90CM and Table S, single life remainder factors applicable where the valuation date is after April 30, 1999, contained in this paragraph (d)(7) (or Table S and Table 80CNSMT contained in § 20.2031–7A(e)(4) for valuation dates after April 30, 1989, and before May 1, 1999) and Table J and Table K contained in paragraph (d)(6) of this section, must be used in the application of the provisions of this section when the section 7520 interest rate component is between 4.2 and 14 percent.

TABLE S—BASED ON LIFE TABLE 90CM SINGLE LIFE REMAINDER FACTORS APPLICABLE AFTER APRIL 30, 1999

[Interest rate]

Age	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%
0	.06752	.06130	.05586	.05109	.04691	.04322	.03998	.03711	.03458	.03233
1	.06137	.05495	.04932	.04438	.04003	.03620	.03283	.02985	.02721	.02487
2	.06325	.05667	.05088	.04580	.04132	.03737	.03388	.03079	.02806	.02563
3	.06545	.05869	.05275	.04752	.04291	.03883	.03523	.03203	.02920	.02668
4	.06784	.06092	.05482	.04944	.04469	.04048	.03676	.03346	.03052	.02791
5	.07040	.06331	.05705	.05152	.04662	.04229	.03845	.03503	.03199	.02928
6	.07310	.06583	.05941	.05372	.04869	.04422	.04025	.03672	.03357	.03076
7	.07594	.06849	.06191	.05607	.05089	.04628	.04219	.03854	.03528	.03236
8	.07891	.07129	.06453	.05853	.05321	.04846	.04424	.04046	.03709	.03407
9	.08203	.07423	.06731	.06115	.05567	.05079	.04643	.04253	.03904	.03592
10	.08532	.07734	.07024	.06392	.05829	.05326	.04877	.04474	.04114	.03790
11	.08875	.08059	.07331	.06683	.06104	.05587	.05124	.04709	.04336	.04002
12	.09233	.08398	.07653	.06989	.06394	.05862	.05385	.04957	.04572	.04226
13	.09601	.08748	.07985	.07304	.06693	.06146	.05655	.05214	.04816	.04458
14	.09974	.09102	.08322	.07624	.06997	.06435	.05929	.05474	.05064	.04694
15	.10350	.09460	.08661	.07946	.07303	.06725	.06204	.05735	.05312	.04930
16	.10728	.09818	.09001	.08268	.07608	.07014	.06479	.05996	.05559	.05164
17	.11108	.10179	.09344	.08592	.07916	.07306	.06755	.06257	.05807	.05399
18	.11494	.10545	.09691	.08921	.08227	.07601	.07034	.06521	.06057	.05636
19	.11889	.10921	.10047	.09259	.08548	.07904	.07322	.06794	.06315	.05880
20	.12298	.11310	.10417	.09610	.08881	.08220	.07622	.07078	.06584	.06135
21	.12722	.11713	.10801	.09976	.09228	.08550	.07935	.07375	.06866	.06403
22	.13159	.12130	.11199	.10354	.09588	.08893	.08260	.07685	.07160	.06682
23	.13613	.12563	.11612	.10748	.09964	.09250	.08601	.08009	.07468	.06975
24	.14084	.13014	.12043	.11160	.10357	.09625	.08958	.08349	.07793	.07284

294

Age	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%
25	.14574	.13484	.12493	.11591	.10768	.10018	.09334	.08708	.08135	.07611
26	.15084	.13974	.12963	.12041	.11199	.10431	.09728	.09085	.08496	.07956
27	.15615	.14485	.13454	.12513	.11652	.10865	.10144	.09484	.08878	.08322
28	.16166	.15016	.13965	.13004	.12124	.11319	.10580	.09901	.09279	.08706
29	.16737	.15567	.14497	.13516	.12617	.11792	.11035	.10339	.09699	.09109
30	.17328	.16138	.15048	.14047	.13129	.12286	.11510	.10796	.10138	.09532
31	.17938	.16728	.15618	.14599	.13661	.12799	.12004	.11272	.10597	.09974
32	.18568	.17339	.16210	.15171	.14214	.13333	.12520	.11769	.11076	.10435
33	.19220	.17972	.16824	.15766	.14790	.13889	.13058	.12289	.11578	.10920
34	.19894	.18627	.17460	.16383	.15388	.14468	.13618	.12831	.12102	.11426
35	.20592	.19307	.18121	.17025	.16011	.15073	.14204	.13399	.12652	.11958
36	.21312	.20010	.18805	.17691	.16658	.15701	.14814	.13990	.13225	.12514
37	.22057	.20737	.19514	.18382	.17331	.16356	.15450	.14608	.13825	.13096
38	.22827	.21490	.20251	.19100	.18031	.17038	.16113	.15253	.14452	.13705
39	.23623	.22270	.21013	.19845	.18759	.17747	.16805	.15927	.15108	.14344
40	.24446	.23078	.21805	.20620	.19516	.18487	.17527	.16631	.15795	.15013
41	.25298	.23915	.22626	.21425	.20305	.19259	.18282	.17368	.16514	.15715
42	.26178	.24782	.23478	.22262	.21125	.20062	.19069	.18138	.17267	.16450
43	.27087	.25678	.24360	.23129	.21977	.20898	.19888	.18941	.18053	.17220
44	.28025	.26603	.25273	.24027	.22860	.21766	.20740	.19777	.18873	.18023
45	.28987	.27555	.26212	.24953	.23772	.22664	.21622	.20644	.19724	.18858
46	.29976	.28533	.27179	.25908	.24714	.23591	.22536	.21542	.20606	.19725
47	.30987	.29535	.28171	.26889	.25682	.24546	.23476	.22468	.21518	.20621
48	.32023	.30563	.29190	.27897	.26678	.25530	.24447	.23425	.22460	.21549
49	.33082	.31615	.30234	.28931	.27702	.26543	.25447	.24412	.23434	.22509
50	.34166	.32694	.31306	.29995	.28756	.27586	.26479	.25432	.24441	.23502
51	.35274	.33798	.32404	.31085	.29838	.28658	.27541	.26482	.25479	.24528
52	.36402	.34924	.33525	.32200	.30946	.29757	.28630	.27561	.26547	.25584
53	.37550	.36070	.34668	.33339	.32078	.30882	.29746	.28667	.27643	.26669
54	.38717	.37237	.35833	.34500	.33234	.32031	.30888	.29801	.28766	.27782
55	.39903	.38424	.37019	.35683	.34413	.33205	.32056	.30961	.29918	.28925
56	.41108	.39631	.38227	.36890	.35617	.34405	.33250	.32149	.31099	.30097
57	.42330	.40857	.39455	.38118	.36844	.35629	.34469	.33363	.32306	.31297
58	.43566	.42098	.40699	.39364	.38089	.36873	.35710	.34600	.33538	.32522
59	.44811	.43351	.41956	.40623	.39350	.38133	.36968	.35855	.34789	.33768
60	.46066	.44613	.43224	.41896	.40624	.39408	.38243	.37127	.36058	.35033
61	.47330	.45887	.44505	.43182	.41914	.40699	.39535	.38418	.37347	.36318
62	.48608	.47175	.45802	.44485	.43223	.42011	.40848	.39732	.38660	.37629
63	.49898	.48478	.47115	.45807	.44550	.43343	.42184	.41069	.39997	.38966
64	.51200	.49793	.48442	.47143	.45895	.44694	.43539	.42427	.41357	.40326
65	.52512	.51121	.49782	.48495	.47255	.46062	.44912	.43805	.42738	.41709
66	.53835	.52461	.51137	.49862	.48634	.47449	.46307	.45206	.44143	.43118
67	.55174	.53818	.52511	.51250	.50034	.48860	.47727	.46633	.45576	.44556
68	.56524	.55188	.53899	.52654	.51452	.50291	.49168	.48083	.47034	.46020
69	.57882	.56568	.55299	.54071	.52885	.51737	.50627	.49552	.48513	.47506
70	.59242	.57951	.56703	.55495	.54325	.53193	.52096	.51034	.50004	.49007
71	.60598	.59332	.58106	.56918	.55767	.54651	.53569	.52520	.51503	.50516
72	.61948	.60707	.59504	.58338	.57206	.56108	.55043	.54009	.53004	.52029
73	.63287	.62073	.60895	.59751	.58640	.57561	.56513	.55495	.54505	.53543
74	.64621	.63435	.62282	.61162	.60073	.59015	.57985	.56984	.56009	.55061
75	.65953	.64796	.63671	.62575	.61510	.60473	.59463	.58480	.57523	.56591
76	.67287	.66160	.65063	.63995	.62954	.61940	.60952	.59989	.59050	.58135
77	.68622	.67526	.66459	.65419	.64404	.63415	.62450	.61509	.60590	.59694
78	.69954	.68892	.67856	.66845	.65858	.64895	.63955	.63036	.62140	.61264
79	.71278	.70250	.69246	.68265	.67308	.66372	.65457	.64563	.63690	.62836
80	.72581	.71588	.70618	.69668	.68740	.67833	.66945	.66077	.65227	.64396
81	.73857	.72899	.71962	.71045	.70147	.69268	.68408	.67566	.66741	.65933
82	.75101	.74178	.73274	.72389	.71522	.70672	.69840	.69024	.68225	.67441
83	.76311	.75423	.74553	.73700	.72864	.72044	.71240	.70451	.69678	.68919
84	.77497	.76645	.75809	.74988	.74183	.73393	.72618	.71857	.71110	.70377
85	.78665	.77848	.77047	.76260	.75487	.74728	.73982	.73250	.72530	.71823
86	.79805	.79025	.78258	.77504	.76764	.76036	.75320	.74617	.73925	.73245
87	.80904	.80159	.79427	.78706	.77998	.77301	.76615	.75940	.75277	.74624
88	.81962	.81251	.80552	.79865	.79188	.78521	.77865	.77220	.76584	.75958
89	.82978	.82302	.81636	.80980	.80335	.79699	.79072	.78455	.77847	.77248
90	.83952	.83309	.82676	.82052	.81437	.80831	.80234	.79645	.79064	.78492
91	.84870	.84260	.83658	.83064	.82479	.81902	.81332	.80771	.80217	.79671
92	.85716	.85136	.84563	.83998	.83441	.82891	.82348	.81812	.81283	.80761
93	.86494	.85942	.85396	.84858	.84326	.83801	.83283	.82771	.82266	.81767
94	.87216	.86690	.86170	.85657	.85149	.84648	.84153	.83664	.83181	.82704
95	.87898	.87397	.86902	.86412	.85928	.85450	.84977	.84510	.84049	.83592
96	.88537	.88060	.87587	.87121	.86659	.86203	.85751	.85305	.84864	.84427
97	.89127	.88672	.88221	.87775	.87335	.86898	.86467	.86040	.85618	.85200
98	.89680	.89245	.88815	.88389	.87968	.87551	.87138	.86730	.86326	.85926

Age	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%
99	.90217	.89803	.89393	.88987	.88585	.88187	.87793	.87402	.87016	.86633
100	.90738	.90344	.89953	.89567	.89183	.88804	.88428	.88056	.87687	.87322
101	.91250	.90876	.90504	.90137	.89772	.89412	.89054	.88699	.88348	.88000
102	.91751	.91396	.91045	.90696	.90350	.90007	.89668	.89331	.88997	.88666
103	.92247	.91912	.91579	.91249	.90922	.90598	.90276	.89957	.89640	.89326
104	.92775	.92460	.92148	.91839	.91532	.91227	.90924	.90624	.90326	.90031
105	.93290	.92996	.92704	.92415	.92127	.91841	.91558	.91276	.90997	.90719
106	.93948	.93680	.93415	.93151	.92889	.92628	.92370	.92113	.91857	.91604
107	.94739	.94504	.94271	.94039	.93808	.93579	.93351	.93124	.92899	.92675
108	.95950	.95767	.95585	.95404	.95224	.95045	.94867	.94689	.94512	.94336
109	.97985	.97893	.97801	.97710	.97619	.97529	.97438	.97348	.97259	.97170

Age	6.2%	6.4%	6.6%	6.8%	7.0%	7.2%	7.4%	7.6%	7.8%	8.0%
0	.03034	.02857	.02700	.02559	.02433	.02321	.02220	.02129	.02047	.01973
1	.02279	.02094	.01929	.01782	.01650	.01533	.01427	.01331	.01246	.01168
2	.02347	.02155	.01983	.01829	.01692	.01569	.01458	.01358	.01268	.01187
3	.02444	.02243	.02065	.01905	.01761	.01632	.01516	.01412	.01317	.01232
4	.02558	.02349	.02163	.01996	.01846	.01712	.01590	.01481	.01382	.01292
5	.02686	.02469	.02275	.02101	.01945	.01804	.01677	.01562	.01458	.01364
6	.02825	.02600	.02398	.02217	.02053	.01906	.01773	.01653	.01544	.01445
7	.02976	.02742	.02532	.02343	.02172	.02019	.01880	.01754	.01640	.01536
8	.03137	.02894	.02675	.02479	.02301	.02140	.01995	.01864	.01744	.01635
9	.03311	.03059	.02832	.02627	.02442	.02274	.02122	.01985	.01859	.01745
10	.03499	.03237	.03001	.02788	.02595	.02420	.02262	.02118	.01987	.01867
11	.03700	.03428	.03183	.02961	.02760	.02578	.02413	.02262	.02125	.02000
12	.03913	.03632	.03377	.03146	.02937	.02748	.02575	.02418	.02275	.02144
13	.04135	.03843	.03579	.03339	.03122	.02924	.02744	.02580	.02431	.02294
14	.04359	.04057	.03783	.03534	.03308	.03102	.02915	.02744	.02587	.02444
15	.04584	.04270	.03986	.03728	.03493	.03279	.03083	.02905	.02742	.02593
16	.04806	.04482	.04187	.03919	.03674	.03452	.03248	.03063	.02892	.02736
17	.05029	.04692	.04387	.04108	.03855	.03623	.03411	.03218	.03040	.02877
18	.05253	.04905	.04588	.04299	.04036	.03795	.03574	.03373	.03187	.03017
19	.05484	.05124	.04796	.04496	.04222	.03972	.03742	.03532	.03339	.03161
20	.05726	.05354	.05013	.04702	.04418	.04158	.03919	.03700	.03498	.03313
21	.05980	.05595	.05242	.04920	.04625	.04354	.04105	.03877	.03667	.03473
22	.06246	.05847	.05482	.05147	.04841	.04559	.04301	.04063	.03844	.03642
23	.06524	.06112	.05734	.05387	.05069	.04777	.04508	.04260	.04032	.03821
24	.06819	.06392	.06001	.05642	.05312	.05008	.04728	.04470	.04232	.04012
25	.07131	.06690	.06285	.05913	.05570	.05255	.04964	.04695	.04447	.04218
26	.07460	.07005	.06586	.06200	.05845	.05518	.05215	.04936	.04677	.04438
27	.07810	.07340	.06907	.06508	.06140	.05800	.05485	.05195	.04925	.04676
28	.08179	.07693	.07246	.06833	.06451	.06098	.05772	.05469	.05189	.04929
29	.08566	.08065	.07603	.07176	.06780	.06414	.06075	.05761	.05469	.05198
30	.08973	.08456	.07978	.07536	.07127	.06748	.06396	.06069	.05766	.05483
31	.09398	.08865	.08372	.07915	.07491	.07098	.06733	.06394	.06078	.05785
32	.09843	.09294	.08785	.08313	.07875	.07468	.07089	.06737	.06409	.06103
33	.10310	.09745	.09220	.08732	.08279	.07858	.07466	.07100	.06759	.06441
34	.10799	.10217	.09676	.09173	.08705	.08269	.07862	.07483	.07129	.06798
35	.11314	.10715	.10157	.09638	.09155	.08704	.08283	.07890	.07522	.07179
36	.11852	.11236	.10662	.10127	.09628	.09162	.08726	.08319	.07938	.07581
37	.12416	.11783	.11193	.10641	.10126	.09645	.09194	.08772	.08377	.08006
38	.13009	.12359	.11751	.11183	.10652	.10155	.09689	.09253	.08843	.08459
39	.13629	.12962	.12338	.11753	.11206	.10693	.10212	.09761	.09337	.08938
40	.14281	.13597	.12955	.12355	.11791	.11262	.10766	.10299	.09860	.09447
41	.14966	.14264	.13606	.12989	.12409	.11864	.11352	.10870	.10417	.09989
42	.15685	.14966	.14291	.13657	.13061	.12500	.11972	.11475	.11006	.10564
43	.16437	.15702	.15010	.14360	.13747	.13171	.12627	.12115	.11631	.11174
44	.17224	.16472	.15764	.15098	.14469	.13876	.13317	.12789	.12290	.11819
45	.18042	.17274	.16550	.15867	.15223	.14615	.14040	.13496	.12982	.12496
46	.18893	.18110	.17370	.16671	.16011	.15387	.14796	.14238	.13708	.13207
47	.19775	.18975	.18220	.17505	.16830	.16190	.15584	.15010	.14466	.13950
48	.20688	.19873	.19102	.18373	.17682	.17027	.16406	.15817	.15258	.14727
49	.21633	.20804	.20018	.19274	.18568	.17898	.17262	.16658	.16084	.15539
50	.22612	.21769	.20969	.20210	.19490	.18805	.18155	.17536	.16948	.16388
51	.23625	.22769	.21955	.21182	.20448	.19749	.19084	.18452	.17849	.17275
52	.24669	.23799	.22973	.22186	.21438	.20726	.20047	.19400	.18784	.18196
53	.25742	.24861	.24022	.23222	.22461	.21735	.21043	.20383	.19753	.19151
54	.26845	.25952	.25101	.24290	.23516	.22777	.22072	.21399	.20756	.20140
55	.27978	.27074	.26212	.25389	.24604	.23853	.23136	.22450	.21793	.21166
56	.29140	.28227	.27355	.26522	.25725	.24963	.24233	.23535	.22867	.22227
57	.30333	.29411	.28529	.27686	.26879	.26106	.25365	.24656	.23976	.23324
58	.31551	.30621	.29731	.28878	.28061	.27278	.26528	.25807	.25116	.24453
59	.32790	.31854	.30956	.30095	.29269	.28477	.27716	.26986	.26284	.25610

Age	6.2%	6.4%	6.6%	6.8%	7.0%	7.2%	7.4%	7.6%	7.8%	8.0%
60	.34050	.33107	.32202	.31334	.30500	.29699	.28929	.28190	.27478	.26794
61	.35331	.34384	.33473	.32598	.31757	.30948	.30170	.29422	.28701	.28007
62	.36639	.35688	.34772	.33892	.33044	.32229	.31443	.30687	.29958	.29255
63	.37974	.37020	.36101	.35216	.34363	.33542	.32750	.31986	.31250	.30539
64	.39334	.38378	.37456	.36568	.35711	.34884	.34087	.33317	.32574	.31857
65	.40718	.39761	.38838	.37947	.37087	.36257	.35455	.34681	.33932	.33208
66	.42128	.41172	.40249	.39357	.38496	.37663	.36858	.36079	.35326	.34597
67	.43569	.42616	.41694	.40803	.39941	.39107	.38299	.37518	.36761	.36028
68	.45038	.44089	.43170	.42281	.41419	.40585	.39777	.38994	.38235	.37499
69	.46531	.45587	.44672	.43786	.42927	.42094	.41286	.40503	.39743	.39006
70	.48040	.47103	.46194	.45312	.44456	.43626	.42820	.42038	.41278	.40540
71	.49558	.48629	.47727	.46851	.46000	.45174	.44371	.43591	.42832	.42095
72	.51082	.50162	.49268	.48399	.47554	.46733	.45934	.45157	.44401	.43666
73	.52607	.51697	.50813	.49952	.49114	.48299	.47506	.46733	.45981	.45249
74	.54139	.53241	.52367	.51515	.50686	.49879	.49092	.48325	.47578	.46849
75	.55683	.54798	.53936	.53095	.52276	.51477	.50698	.49938	.49197	.48474
76	.57243	.56373	.55524	.54696	.53888	.53100	.52330	.51579	.50846	.50130
77	.58819	.57965	.57132	.56318	.55523	.54747	.53988	.53247	.52523	.51815
78	.60408	.59572	.58755	.57957	.57177	.56414	.55668	.54939	.54225	.53527
79	.62001	.61184	.60385	.59604	.58840	.58092	.57360	.56644	.55943	.55256
80	.63582	.62786	.62007	.61244	.60497	.59765	.59048	.58347	.57659	.56985
81	.65142	.64367	.63608	.62864	.62135	.61421	.60721	.60034	.59361	.58701
82	.66673	.65920	.65182	.64458	.63748	.63052	.62368	.61698	.61041	.60395
83	.68175	.67444	.66728	.66024	.65334	.64656	.63991	.63338	.62696	.62066
84	.69657	.68950	.68256	.67574	.66904	.66246	.65599	.64964	.64340	.63727
85	.71128	.70446	.69775	.69116	.68467	.67830	.67204	.66587	.65982	.65386
86	.72576	.71919	.71272	.70636	.70010	.69394	.68789	.68193	.67606	.67029
87	.73981	.73349	.72726	.72114	.71511	.70917	.70333	.69757	.69190	.68632
88	.75342	.74735	.74137	.73548	.72968	.72396	.71833	.71279	.70732	.70194
89	.76658	.76076	.75503	.74938	.74381	.73832	.73290	.72757	.72231	.71712
90	.77928	.77371	.76823	.76281	.75748	.75221	.74702	.74190	.73684	.73186
91	.79131	.78600	.78075	.77557	.77046	.76542	.76044	.75553	.75068	.74589
92	.80246	.79737	.79235	.78740	.78250	.77767	.77290	.76818	.76353	.75893
93	.81274	.80788	.80307	.79832	.79363	.78899	.78441	.77989	.77542	.77100
94	.82232	.81766	.81306	.80850	.80401	.79956	.79517	.79082	.78653	.78228
95	.83141	.82695	.82254	.81818	.81387	.80961	.80539	.80122	.79710	.79302
96	.83996	.83569	.83147	.82729	.82316	.81907	.81503	.81103	.80707	.80315
97	.84787	.84378	.83973	.83573	.83176	.82784	.82396	.82012	.81632	.81255
98	.85530	.85138	.84750	.84366	.83985	.83609	.83236	.82867	.82502	.82140
99	.86255	.85880	.85508	.85140	.84776	.84415	.84057	.83703	.83353	.83005
100	.86960	.86601	.86246	.85894	.85546	.85200	.84858	.84519	.84183	.83849
101	.87655	.87313	.86974	.86638	.86305	.85975	.85648	.85324	.85003	.84684
102	.88338	.88012	.87689	.87369	.87052	.86738	.86426	.86116	.85809	.85505
103	.89015	.88706	.88399	.88095	.87793	.87494	.87197	.86903	.86611	.86321
104	.89737	.89446	.89157	.88871	.88586	.88304	.88024	.87745	.87469	.87195
105	.90443	.90170	.89898	.89628	.89360	.89094	.88830	.88568	.88307	.88049
106	.91351	.91101	.90852	.90605	.90359	.90115	.89873	.89632	.89392	.89154
107	.92452	.92230	.92010	.91791	.91573	.91356	.91141	.90927	.90714	.90502
108	.94161	.93987	.93814	.93641	.93469	.93298	.93128	.92958	.92790	.92622
109	.97081	.96992	.96904	.96816	.96729	.96642	.96555	.96468	.96382	.96296

Age	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
0	.01906	.01845	.01790	.01740	.01694	.01652	.01613	.01578	.01546	.01516
1	.01098	.01034	.00977	.00924	.00876	.00833	.00793	.00756	.00722	.00691
2	.01113	.01046	.00986	.00930	.00880	.00834	.00791	.00753	.00717	.00684
3	.01155	.01084	.01020	.00962	.00909	.00860	.00816	.00775	.00737	.00702
4	.01211	.01137	.01069	.01008	.00952	.00900	.00853	.00810	.00770	.00733
5	.01279	.01201	.01130	.01065	.01006	.00952	.00902	.00856	.00814	.00775
6	.01356	.01274	.01199	.01131	.01068	.01011	.00959	.00910	.00865	.00824
7	.01442	.01356	.01277	.01205	.01140	.01079	.01023	.00972	.00925	.00881
8	.01536	.01446	.01363	.01287	.01218	.01154	.01096	.01041	.00991	.00945
9	.01641	.01546	.01460	.01380	.01307	.01240	.01178	.01120	.01068	.01019
10	.01758	.01659	.01567	.01484	.01407	.01336	.01270	.01210	.01154	.01103
11	.01886	.01781	.01686	.01598	.01517	.01442	.01373	.01310	.01251	.01196
12	.02024	.01915	.01814	.01721	.01636	.01558	.01485	.01419	.01357	.01299
13	.02168	.02054	.01948	.01851	.01762	.01679	.01603	.01533	.01467	.01407
14	.02313	.02193	.02083	.01981	.01887	.01801	.01721	.01646	.01578	.01514
15	.02456	.02330	.02214	.02107	.02009	.01918	.01834	.01756	.01684	.01617
16	.02593	.02462	.02340	.02229	.02126	.02030	.01942	.01860	.01785	.01714
17	.02728	.02590	.02463	.02346	.02238	.02138	.02046	.01960	.01880	.01806
18	.02861	.02717	.02584	.02462	.02348	.02243	.02146	.02056	.01972	.01894
19	.02998	.02847	.02708	.02580	.02461	.02351	.02249	.02154	.02066	.01984
20	.03142	.02984	.02839	.02704	.02580	.02465	.02357	.02258	.02165	.02079

Age	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
21	.03295	.03130	.02978	.02837	.02706	.02585	.02473	.02368	.02271	.02180
22	.03455	.03283	.03124	.02976	.02839	.02712	.02594	.02484	.02382	.02286
23	.03626	.03446	.03279	.03124	.02981	.02847	.02723	.02608	.02500	.02400
24	.03809	.03620	.03446	.03283	.03133	.02993	.02863	.02741	.02628	.02522
25	.04005	.03808	.03625	.03456	.03298	.03151	.03014	.02887	.02768	.02656
26	.04216	.04010	.03819	.03641	.03476	.03322	.03178	.03044	.02919	.02802
27	.04444	.04229	.04029	.03843	.03670	.03508	.03357	.03217	.03085	.02962
28	.04687	.04463	.04254	.04059	.03877	.03708	.03550	.03402	.03263	.03133
29	.04946	.04712	.04493	.04289	.04099	.03922	.03756	.03600	.03455	.03318
30	.05221	.04976	.04748	.04534	.04335	.04149	.03975	.03812	.03659	.03515
31	.05511	.05255	.05017	.04794	.04585	.04390	.04208	.04037	.03876	.03725
32	.05818	.05551	.05302	.05069	.04851	.04647	.04455	.04276	.04107	.03948
33	.06144	.05866	.05606	.05363	.05135	.04921	.04720	.04532	.04355	.04188
34	.06489	.06200	.05928	.05674	.05436	.05212	.05002	.04805	.04619	.04444
35	.06857	.06555	.06273	.06007	.05758	.05524	.05304	.05097	.04902	.04718
36	.07246	.06932	.06638	.06361	.06101	.05856	.05626	.05409	.05205	.05012
37	.07659	.07332	.07025	.06737	.06466	.06210	.05969	.05742	.05528	.05325
38	.08098	.07758	.07439	.07138	.06855	.06588	.06336	.06099	.05874	.05662
39	.08563	.08210	.07878	.07565	.07270	.06992	.06729	.06480	.06245	.06023
40	.09059	.08692	.08347	.08021	.07714	.07423	.07149	.06889	.06643	.06411
41	.09586	.09206	.08848	.08509	.08189	.07886	.07600	.07329	.07072	.06828
42	.10147	.09753	.09381	.09029	.08696	.08381	.08083	.07800	.07531	.07277
43	.10742	.10334	.09948	.09583	.09237	.08909	.08598	.08304	.08024	.07758
44	.11373	.10950	.10551	.10172	.09813	.09472	.09148	.08841	.08549	.08272
45	.12035	.11599	.11185	.10792	.10420	.10066	.09730	.09410	.09106	.08817
46	.12732	.12281	.11853	.11447	.11061	.10694	.10345	.10013	.09696	.09395
47	.13460	.12995	.12553	.12133	.11733	.11353	.10991	.10646	.10317	.10004
48	.14223	.13743	.13287	.12853	.12439	.12046	.11671	.11313	.10972	.10646
49	.15020	.14526	.14056	.13608	.13181	.12774	.12385	.12015	.11661	.11322
50	.15855	.15347	.14862	.14401	.13960	.13540	.13138	.12754	.12388	.12037
51	.16727	.16205	.15707	.15232	.14777	.14344	.13929	.13532	.13153	.12789
52	.17634	.17098	.16587	.16097	.15630	.15183	.14755	.14345	.13953	.13577
53	.18576	.18027	.17501	.16999	.16518	.16057	.15616	.15194	.14789	.14400
54	.19552	.18990	.18451	.17935	.17441	.16968	.16514	.16078	.15661	.15260
55	.20564	.19989	.19437	.18908	.18402	.17915	.17449	.17001	.16571	.16157
56	.21613	.21025	.20461	.19919	.19400	.18901	.18422	.17962	.17519	.17093
57	.22698	.22098	.21522	.20968	.20436	.19925	.19434	.18961	.18507	.18069
58	.23816	.23204	.22616	.22051	.21507	.20984	.20481	.19996	.19530	.19080
59	.24962	.24339	.23740	.23163	.22608	.22073	.21558	.21062	.20584	.20123
60	.26136	.25502	.24892	.24304	.23738	.23192	.22666	.22158	.21669	.21196
61	.27339	.26695	.26075	.25477	.24900	.24343	.23806	.23288	.22787	.22304
62	.28578	.27925	.27295	.26687	.26100	.25533	.24985	.24456	.23945	.23451
63	.29854	.29192	.28553	.27935	.27339	.26762	.26205	.25666	.25145	.24641
64	.31164	.30494	.29846	.29221	.28615	.28030	.27463	.26915	.26384	.25870
65	.32508	.31831	.31177	.30543	.29930	.29336	.28761	.28203	.27663	.27140
66	.33891	.33208	.32547	.31906	.31285	.30684	.30101	.29536	.28987	.28456
67	.35318	.34630	.33963	.33316	.32689	.32081	.31491	.30918	.30363	.29823
68	.36785	.36093	.35422	.34770	.34138	.33524	.32928	.32349	.31787	.31240
69	.38290	.37595	.36920	.36265	.35628	.35009	.34408	.33824	.33256	.32703
70	.39823	.39127	.38450	.37791	.37151	.36529	.35924	.35335	.34762	.34204
71	.41378	.40681	.40003	.39343	.38701	.38076	.37467	.36875	.36298	.35736
72	.42950	.42253	.41575	.40914	.40271	.39644	.39034	.38438	.37858	.37293
73	.44535	.43840	.43162	.42502	.41858	.41231	.40619	.40022	.39440	.38872
74	.46139	.45446	.44771	.44112	.43469	.42842	.42230	.41632	.41049	.40479
75	.47769	.47080	.46408	.45752	.45111	.44485	.43874	.43277	.42693	.42123
76	.49430	.48747	.48079	.47427	.46790	.46167	.45558	.44963	.44380	.43811
77	.51123	.50447	.49786	.49139	.48506	.47888	.47282	.46690	.46111	.45543
78	.52845	.52177	.51523	.50884	.50257	.49645	.49044	.48457	.47881	.47317
79	.54584	.53926	.53282	.52650	.52032	.51426	.50833	.50251	.49681	.49122
80	.56325	.55678	.55044	.54423	.53813	.53216	.52630	.52056	.51492	.50939
81	.58054	.57419	.56797	.56186	.55587	.54999	.54422	.53856	.53300	.52754
82	.59762	.59140	.58530	.57931	.57343	.56766	.56198	.55641	.55094	.54557
83	.61448	.60840	.60243	.59657	.59081	.58515	.57958	.57411	.56874	.56346
84	.63124	.62531	.61949	.61376	.60813	.60259	.59715	.59179	.58652	.58134
85	.64800	.64224	.63657	.63099	.62550	.62010	.61478	.60955	.60441	.59934
86	.66461	.65902	.65351	.64810	.64276	.63751	.63233	.62724	.62222	.61728
87	.68083	.67541	.67008	.66483	.65965	.65455	.64953	.64458	.63970	.63489
88	.69663	.69140	.68624	.68116	.67615	.67121	.66634	.66154	.65680	.65213
89	.71201	.70696	.70199	.69708	.69224	.68747	.68276	.67811	.67353	.66900
90	.72694	.72209	.71730	.71257	.70791	.70330	.69876	.69427	.68984	.68547
91	.74117	.73650	.73190	.72735	.72286	.71842	.71404	.70972	.70545	.70123
92	.75439	.74991	.74548	.74110	.73678	.73251	.72829	.72412	.72000	.71593
93	.76664	.76233	.75806	.75385	.74969	.74557	.74150	.73748	.73350	.72957
94	.77809	.77394	.76983	.76578	.76177	.75780	.75388	.75000	.74616	.74237

Age	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
95	.78899	.78500	.78106	.77715	.77329	.76947	.76569	.76195	.75826	.75460
96	.79928	.79544	.79165	.78790	.78418	.78050	.77686	.77326	.76970	.76617
97	.80883	.80514	.80149	.79787	.79430	.79075	.78725	.78377	.78033	.77693
98	.81781	.81427	.81075	.80727	.80382	.80041	.79703	.79368	.79036	.78708
99	.82661	.82320	.81982	.81648	.81316	.80988	.80662	.80340	.80020	.79704
100	.83519	.83192	.82868	.82547	.82228	.81913	.81600	.81290	.80982	.80678
101	.84368	.84055	.83744	.83437	.83131	.82829	.82529	.82231	.81936	.81643
102	.85203	.84904	.84607	.84313	.84021	.83731	.83444	.83159	.82876	.82596
103	.86034	.85748	.85465	.85184	.84906	.84629	.84355	.84082	.83812	.83544
104	.86923	.86653	.86385	.86119	.85855	.85593	.85333	.85074	.84818	.84563
105	.87792	.87537	.87283	.87032	.86782	.86534	.86287	.86042	.85799	.85557
106	.88918	.88683	.88450	.88218	.87987	.87758	.87530	.87304	.87079	.86855
107	.90291	.90082	.89873	.89666	.89460	.89255	.89051	.88849	.88647	.88447
108	.92455	.92288	.92123	.91958	.91794	.91630	.91468	.91306	.91145	.90984
109	.96211	.96125	.96041	.95956	.95872	.95788	.95704	.95620	.95537	.95455

Age	10.2%	10.4%	10.6%	10.8%	11.0%	11.2%	11.4%	11.6%	11.8%	12.0%
0	.01488	.01463	.01439	.01417	.01396	.01377	.01359	.01343	.01327	.01312
1	.00662	.00636	.00612	.00589	.00568	.00548	.00530	.00513	.00497	.00482
2	.00654	.00626	.00600	.00576	.00554	.00533	.00514	.00496	.00479	.00463
3	.00670	.00641	.00613	.00588	.00564	.00542	.00522	.00502	.00484	.00468
4	.00699	.00668	.00639	.00612	.00587	.00563	.00542	.00521	.00502	.00484
5	.00739	.00706	.00675	.00646	.00620	.00595	.00571	.00550	.00529	.00510
6	.00786	.00751	.00718	.00687	.00659	.00633	.00608	.00585	.00563	.00543
7	.00841	.00803	.00769	.00736	.00706	.00678	.00652	.00627	.00604	.00582
8	.00902	.00863	.00826	.00791	.00759	.00730	.00702	.00675	.00651	.00628
9	.00973	.00931	.00892	.00856	.00822	.00790	.00760	.00733	.00706	.00682
10	.01055	.01010	.00969	.00930	.00894	.00861	.00829	.00799	.00772	.00746
11	.01146	.01099	.01055	.01014	.00976	.00940	.00907	.00875	.00846	.00818
12	.01246	.01196	.01150	.01106	.01066	.01028	.00993	.00960	.00928	.00899
13	.01351	.01298	.01249	.01204	.01161	.01121	.01084	.01049	.01016	.00985
14	.01455	.01400	.01348	.01300	.01255	.01213	.01173	.01136	.01102	.01069
15	.01555	.01497	.01443	.01392	.01345	.01300	.01259	.01220	.01183	.01148
16	.01648	.01587	.01530	.01477	.01427	.01380	.01336	.01295	.01257	.01220
17	.01737	.01673	.01612	.01556	.01504	.01455	.01408	.01365	.01324	.01286
18	.01822	.01754	.01691	.01632	.01576	.01525	.01476	.01430	.01387	.01347
19	.01908	.01837	.01770	.01708	.01650	.01595	.01544	.01495	.01450	.01407
20	.01999	.01924	.01854	.01788	.01726	.01669	.01615	.01564	.01516	.01471
21	.02096	.02017	.01943	.01874	.01809	.01748	.01691	.01637	.01586	.01539
22	.02197	.02114	.02036	.01963	.01895	.01830	.01770	.01713	.01660	.01610
23	.02306	.02218	.02136	.02059	.01987	.01919	.01855	.01795	.01739	.01686
24	.02424	.02331	.02245	.02163	.02087	.02016	.01948	.01885	.01825	.01769
25	.02552	.02455	.02364	.02278	.02197	.02122	.02051	.01984	.01920	.01861
26	.02692	.02589	.02493	.02403	.02318	.02238	.02162	.02091	.02025	.01961
27	.02846	.02738	.02636	.02541	.02451	.02367	.02287	.02212	.02141	.02074
28	.03012	.02898	.02791	.02690	.02595	.02506	.02422	.02342	.02267	.02196
29	.03190	.03070	.02957	.02851	.02751	.02656	.02567	.02483	.02404	.02329
30	.03381	.03254	.03135	.03023	.02917	.02817	.02723	.02634	.02551	.02471
31	.03583	.03450	.03324	.03206	.03094	.02989	.02890	.02796	.02707	.02623
32	.03799	.03659	.03527	.03402	.03284	.03173	.03068	.02968	.02874	.02785
33	.04031	.03883	.03744	.03612	.03488	.03371	.03260	.03155	.03055	.02961
34	.04279	.04123	.03976	.03838	.03707	.03583	.03465	.03354	.03249	.03149
35	.04545	.04382	.04227	.04081	.03943	.03812	.03688	.03571	.03459	.03354
36	.04830	.04658	.04495	.04341	.04196	.04058	.03927	.03803	.03685	.03573
37	.05134	.04953	.04782	.04620	.04467	.04321	.04183	.04052	.03928	.03809
38	.05462	.05272	.05092	.04921	.04760	.04606	.04461	.04322	.04191	.04066
39	.05812	.05613	.05424	.05245	.05075	.04913	.04760	.04614	.04475	.04343
40	.06190	.05981	.05782	.05594	.05415	.05245	.05083	.04929	.04783	.04643
41	.06597	.06378	.06170	.05972	.05784	.05605	.05435	.05272	.05118	.04970
42	.07035	.06806	.06587	.06380	.06182	.05994	.05815	.05644	.05481	.05326
43	.07505	.07265	.07036	.06818	.06611	.06414	.06225	.06045	.05874	.05710
44	.08008	.07757	.07518	.07290	.07072	.06865	.06667	.06478	.06298	.06125
45	.08542	.08279	.08029	.07791	.07563	.07346	.07138	.06940	.06750	.06569
46	.09108	.08834	.08573	.08324	.08085	.07858	.07640	.07432	.07233	.07043
47	.09705	.09419	.09147	.08886	.08637	.08399	.08172	.07954	.07745	.07545
48	.10335	.10038	.09754	.09482	.09222	.08973	.08735	.08507	.08288	.08078
49	.10999	.10690	.10394	.10111	.09840	.09581	.09332	.09093	.08864	.08644
50	.11701	.11380	.11073	.10778	.10496	.10225	.09965	.09716	.09477	.09247
51	.12441	.12108	.11789	.11482	.11189	.10907	.10636	.10376	.10126	.09886
52	.13217	.12871	.12540	.12222	.11916	.11623	.11341	.11071	.10810	.10560
53	.14028	.13670	.13327	.12997	.12680	.12375	.12082	.11801	.11529	.11268
54	.14875	.14505	.14150	.13808	.13480	.13163	.12859	.12566	.12284	.12012
55	.15760	.15378	.15011	.14657	.14317	.13989	.13674	.13370	.13077	.12794

Age	10.2%	10.4%	10.6%	10.8%	11.0%	11.2%	11.4%	11.6%	11.8%	12.0%
56	.16684	.16290	.15911	.15546	.15194	.14855	.14528	.14213	.13909	.13615
57	.17648	.17242	.16851	.16474	.16111	.15760	.15422	.15096	.14781	.14477
58	.18647	.18229	.17827	.17438	.17064	.16702	.16353	.16015	.15689	.15374
59	.19678	.19249	.18835	.18435	.18049	.17676	.17316	.16968	.16631	.16305
60	.20740	.20300	.19875	.19464	.19066	.18682	.18311	.17952	.17604	.17268
61	.21837	.21385	.20949	.20527	.20119	.19724	.19341	.18971	.18613	.18266
62	.22973	.22511	.22064	.21631	.21212	.20807	.20414	.20033	.19664	.19306
63	.24152	.23680	.23222	.22779	.22350	.21934	.21530	.21139	.20760	.20392
64	.25372	.24890	.24422	.23969	.23529	.23103	.22690	.22289	.21899	.21521
65	.26633	.26141	.25664	.25201	.24752	.24316	.23893	.23482	.23083	.22695
66	.27940	.27439	.26953	.26481	.26023	.25577	.25145	.24724	.24316	.23918
67	.29299	.28790	.28296	.27815	.27348	.26894	.26453	.26024	.25606	.25200
68	.30709	.30193	.29691	.29202	.28728	.28265	.27816	.27378	.26952	.26537
69	.32166	.31643	.31134	.30639	.30157	.29687	.29230	.28785	.28351	.27928
70	.33661	.33133	.32618	.32116	.31628	.31152	.30688	.30235	.29794	.29364
71	.35188	.34654	.34134	.33627	.33133	.32651	.32181	.31722	.31275	.30838
72	.36742	.36204	.35679	.35168	.34668	.34181	.33706	.33241	.32788	.32345
73	.38317	.37776	.37248	.36733	.36229	.35738	.35257	.34788	.34330	.33882
74	.39923	.39380	.38849	.38330	.37823	.37328	.36844	.36370	.35908	.35455
75	.41566	.41021	.40489	.39968	.39459	.38961	.38474	.37997	.37531	.37074
76	.43254	.42709	.42176	.41655	.41144	.40645	.40156	.39677	.39208	.38749
77	.44988	.44444	.43912	.43391	.42880	.42380	.41891	.41411	.40940	.40479
78	.46765	.46224	.45694	.45174	.44665	.44166	.43677	.43197	.42726	.42265
79	.48574	.48037	.47510	.46993	.46487	.45990	.45502	.45024	.44554	.44094
80	.50397	.49865	.49343	.48830	.48327	.47834	.47349	.46873	.46406	.45947
81	.52219	.51693	.51176	.50669	.50171	.49682	.49201	.48729	.48265	.47809
82	.54029	.53510	.53000	.52499	.52007	.51523	.51047	.50580	.50120	.49667
83	.55826	.55315	.54813	.54319	.53834	.53356	.52886	.52424	.51969	.51522
84	.57624	.57123	.56629	.56144	.55666	.55195	.54732	.54277	.53828	.53386
85	.59435	.58944	.58460	.57984	.57516	.57054	.56599	.56151	.55710	.55275
86	.61241	.60762	.60289	.59824	.59365	.58913	.58468	.58029	.57596	.57170
87	.63015	.62548	.62087	.61633	.61185	.60744	.60309	.59880	.59456	.59039
88	.64753	.64299	.63851	.63409	.62973	.62543	.62118	.61700	.61287	.60879
89	.66454	.66013	.65579	.65150	.64726	.64308	.63895	.63488	.63086	.62689
90	.68115	.67689	.67268	.66853	.66442	.66037	.65637	.65241	.64851	.64465
91	.69706	.69294	.68887	.68486	.68089	.67696	.67309	.66925	.66547	.66173
92	.71190	.70792	.70399	.70011	.69627	.69247	.68872	.68501	.68134	.67771
93	.72569	.72184	.71804	.71429	.71057	.70689	.70326	.69967	.69611	.69259
94	.73861	.73490	.73123	.72759	.72400	.72044	.71692	.71344	.71000	.70659
95	.75097	.74739	.74384	.74033	.73686	.73342	.73002	.72665	.72331	.72001
96	.76267	.75922	.75579	.75240	.74905	.74572	.74243	.73917	.73595	.73275
97	.77356	.77022	.76691	.76363	.76039	.75718	.75399	.75084	.74772	.74463
98	.78382	.78059	.77740	.77423	.77110	.76799	.76491	.76186	.75884	.75584
99	.79390	.79079	.78771	.78465	.78162	.77862	.77565	.77270	.76978	.76688
100	.80376	.80076	.79779	.79485	.79193	.78904	.78617	.78333	.78051	.77771
101	.81353	.81066	.80780	.80497	.80217	.79938	.79662	.79388	.79117	.78847
102	.82318	.82042	.81768	.81496	.81227	.80960	.80694	.80431	.80170	.79911
103	.83278	.83014	.82752	.82491	.82233	.81977	.81723	.81470	.81220	.80971
104	.84310	.84059	.83810	.83563	.83317	.83073	.82831	.82591	.82352	.82115
105	.85318	.85079	.84843	.84607	.84374	.84142	.83911	.83682	.83455	.83229
106	.86633	.86413	.86193	.85975	.85758	.85543	.85329	.85116	.84904	.84694
107	.88247	.88049	.87852	.87656	.87460	.87266	.87073	.86881	.86690	.86500
108	.90825	.90666	.90507	.90350	.90193	.90037	.89881	.89727	.89572	.89419
109	.95372	.95290	.95208	.95126	.95045	.94964	.94883	.94803	.94723	.94643

Age	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%	13.4%	13.6%	13.8%	14.0%
0	.01298	.01285	.01273	.01261	.01250	.01240	.01230	.01221	.01212	.01203
1	.00468	.00455	.00443	.00431	.00420	.00410	.00400	.00391	.00382	.00374
2	.00448	.00435	.00421	.00409	.00398	.00387	.00376	.00366	.00357	.00348
3	.00452	.00437	.00423	.00410	.00398	.00386	.00375	.00365	.00355	.00345
4	.00468	.00452	.00437	.00423	.00410	.00397	.00386	.00375	.00364	.00354
5	.00493	.00476	.00460	.00445	.00431	.00418	.00405	.00393	.00382	.00371
6	.00524	.00506	.00489	.00473	.00458	.00444	.00430	.00418	.00406	.00394
7	.00562	.00543	.00525	.00508	.00492	.00477	.00462	.00449	.00436	.00423
8	.00606	.00586	.00566	.00548	.00531	.00515	.00499	.00485	.00471	.00458
9	.00659	.00637	.00616	.00597	.00579	.00561	.00545	.00529	.00514	.00500
10	.00721	.00698	.00676	.00655	.00636	.00617	.00600	.00583	.00567	.00552
11	.00792	.00767	.00744	.00722	.00701	.00682	.00663	.00645	.00628	.00612
12	.00871	.00845	.00821	.00797	.00775	.00754	.00735	.00716	.00698	.00681
13	.00955	.00928	.00902	.00877	.00854	.00831	.00810	.00790	.00771	.00753
14	.01038	.01009	.00981	.00955	.00930	.00907	.00885	.00864	.00843	.00824
15	.01116	.01085	.01056	.01028	.01002	.00977	.00954	.00932	.00910	.00890
16	.01186	.01153	.01123	.01094	.01066	.01040	.01015	.00992	.00969	.00948

Age	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%	13.4%	13.6%	13.8%	14.0%
17	.01250	.01215	.01183	.01152	.01124	.01096	.01070	.01045	.01022	.00999
18	.01308	.01272	.01238	.01206	.01175	.01147	.01119	.01093	.01068	.01044
19	.01367	.01329	.01293	.01259	.01227	.01196	.01167	.01140	.01113	.01088
20	.01428	.01388	.01350	.01314	.01280	.01248	.01217	.01188	.01161	.01134
21	.01494	.01451	.01411	.01373	.01337	.01303	.01271	.01240	.01211	.01183
22	.01562	.01517	.01475	.01435	.01397	.01361	.01326	.01294	.01263	.01233
23	.01635	.01588	.01543	.01501	.01460	.01422	.01386	.01351	.01319	.01287
24	.01716	.01665	.01618	.01573	.01530	.01489	.01451	.01415	.01380	.01347
25	.01804	.01751	.01701	.01653	.01608	.01565	.01524	.01485	.01448	.01413
26	.01902	.01845	.01792	.01741	.01693	.01648	.01604	.01563	.01524	.01487
27	.02011	.01951	.01895	.01841	.01790	.01742	.01696	.01652	.01610	.01571
28	.02129	.02066	.02006	.01949	.01895	.01844	.01795	.01748	.01704	.01662
29	.02258	.02191	.02127	.02067	.02009	.01955	.01903	.01853	.01806	.01762
30	.02396	.02325	.02257	.02193	.02132	.02074	.02019	.01966	.01916	.01869
31	.02543	.02467	.02396	.02328	.02263	.02201	.02143	.02087	.02034	.01983
32	.02701	.02621	.02545	.02472	.02404	.02338	.02276	.02217	.02160	.02106
33	.02871	.02786	.02706	.02629	.02556	.02487	.02420	.02357	.02297	.02240
34	.03054	.02964	.02879	.02797	.02720	.02646	.02576	.02509	.02445	.02383
35	.03253	.03158	.03067	.02981	.02898	.02820	.02745	.02674	.02606	.02541
36	.03467	.03366	.03269	.03178	.03090	.03007	.02928	.02852	.02779	.02710
37	.03697	.03590	.03488	.03391	.03298	.03209	.03125	.03044	.02967	.02893
38	.03947	.03833	.03725	.03622	.03524	.03430	.03340	.03254	.03172	.03094
39	.04217	.04096	.03982	.03873	.03768	.03669	.03573	.03482	.03395	.03312
40	.04510	.04383	.04262	.04146	.04035	.03930	.03828	.03732	.03639	.03550
41	.04830	.04695	.04567	.04445	.04327	.04215	.04108	.04005	.03907	.03812
42	.05177	.05035	.04900	.04770	.04646	.04527	.04413	.04304	.04200	.04100
43	.05553	.05404	.05261	.05123	.04992	.04866	.04746	.04630	.04520	.04413
44	.05960	.05802	.05651	.05506	.05368	.05235	.05107	.04985	.04867	.04754
45	.06395	.06229	.06069	.05917	.05770	.05630	.05495	.05365	.05241	.05121
46	.06860	.06685	.06517	.06356	.06202	.06053	.05911	.05774	.05643	.05516
47	.07353	.07169	.06992	.06823	.06660	.06504	.06353	.06209	.06070	.05936
48	.07877	.07684	.07498	.07320	.07149	.06984	.06826	.06673	.06527	.06385
49	.08433	.08231	.08036	.07849	.07669	.07495	.07329	.07168	.07013	.06864
50	.09026	.08814	.08609	.08413	.08224	.08042	.07867	.07698	.07535	.07378
51	.09655	.09433	.09219	.09013	.08815	.08624	.08440	.08262	.08091	.07926
52	.10318	.10086	.09863	.09647	.09439	.09239	.09046	.08860	.08680	.08506
53	.11017	.10774	.10541	.10315	.10098	.09888	.09686	.09491	.09302	.09120
54	.11750	.11498	.11254	.11019	.10792	.10572	.10361	.10156	.09958	.09767
55	.12522	.12258	.12005	.11759	.11522	.11294	.11072	.10859	.10652	.10451
56	.13332	.13059	.12794	.12539	.12292	.12054	.11823	.11599	.11383	.11174
57	.14183	.13899	.13624	.13359	.13102	.12853	.12613	.12380	.12154	.11936
58	.15070	.14775	.14490	.14215	.13948	.13689	.13439	.13197	.12962	.12734
59	.15990	.15685	.15389	.15103	.14826	.14558	.14298	.14046	.13801	.13564
60	.16942	.16626	.16321	.16024	.15737	.15459	.15189	.14927	.14673	.14426
61	.17929	.17603	.17287	.16981	.16684	.16395	.16115	.15844	.15580	.15324
62	.18960	.18623	.18297	.17980	.17673	.17375	.17085	.16803	.16530	.16264
63	.20035	.19688	.19352	.19025	.18708	.18400	.18100	.17809	.17525	.17250
64	.21154	.20797	.20451	.20114	.19787	.19469	.19159	.18859	.18566	.18281
65	.22318	.21951	.21595	.21249	.20912	.20584	.20265	.19955	.19652	.19358
66	.23532	.23156	.22790	.22434	.22088	.21751	.21422	.21102	.20791	.20487
67	.24804	.24419	.24044	.23679	.23324	.22977	.22640	.22311	.21990	.21678
68	.26133	.25740	.25356	.24983	.24618	.24263	.23917	.23579	.23250	.22929
69	.27516	.27114	.26723	.26341	.25969	.25605	.25251	.24905	.24567	.24237
70	.28945	.28536	.28137	.27747	.27367	.26996	.26633	.26279	.25934	.25596
71	.30412	.29996	.29590	.29193	.28806	.28427	.28057	.27696	.27343	.26998
72	.31913	.31491	.31078	.30675	.30281	.29895	.29519	.29150	.28790	.28438
73	.33444	.33016	.32597	.32188	.31788	.31396	.31013	.30638	.30271	.29913
74	.35012	.34579	.34155	.33741	.33335	.32938	.32549	.32168	.31795	.31430
75	.36628	.36190	.35762	.35343	.34932	.34530	.34136	.33750	.33372	.33001
76	.38299	.37858	.37427	.37004	.36589	.36183	.35784	.35394	.35011	.34636
77	.40028	.39585	.39151	.38725	.38307	.37898	.37496	.37103	.36716	.36337
78	.41812	.41368	.40933	.40506	.40086	.39675	.39271	.38874	.38485	.38103
79	.43641	.43198	.42762	.42334	.41914	.41502	.41096	.40698	.40308	.39924
80	.45496	.45054	.44619	.44192	.43772	.43360	.42954	.42556	.42164	.41779
81	.47360	.46920	.46487	.46061	.45643	.45231	.44827	.44429	.44038	.43653
82	.49223	.48785	.48355	.47932	.47516	.47106	.46703	.46307	.45916	.45532
83	.51081	.50648	.50221	.49802	.49388	.48982	.48581	.48187	.47799	.47416
84	.52951	.52523	.52101	.51686	.51277	.50874	.50477	.50086	.49701	.49321
85	.54847	.54425	.54009	.53600	.53196	.52798	.52406	.52019	.51638	.51262
86	.56749	.56335	.55926	.55523	.55126	.54734	.54348	.53966	.53591	.53220
87	.58627	.58221	.57820	.57425	.57035	.56650	.56270	.55895	.55526	.55161
88	.60477	.60079	.59688	.59301	.58919	.58542	.58170	.57802	.57439	.57081
89	.62297	.61909	.61527	.61149	.60776	.60408	.60044	.59685	.59330	.58979
90	.64084	.63707	.63335	.62968	.62604	.62246	.61891	.61540	.61194	.60851

Age	12.2%	12.4%	12.6%	12.8%	13.0%	13.2%	13.4%	13.6%	13.8%	14.0%
91	.65803	.65437	.65076	.64719	.64366	.64017	.63672	.63330	.62993	.62659
92	.67412	.67058	.66707	.66360	.66017	.65678	.65342	.65010	.64682	.64357
93	.68911	.68567	.68227	.67890	.67557	.67227	.66901	.66578	.66258	.65942
94	.70321	.69988	.69657	.69330	.69006	.68686	.68369	.68055	.67744	.67437
95	.71674	.71351	.71031	.70713	.70399	.70088	.69781	.69476	.69174	.68875
96	.72959	.72646	.72335	.72028	.71724	.71422	.71123	.70828	.70534	.70244
97	.74156	.73853	.73552	.73254	.72959	.72666	.72376	.72089	.71804	.71522
98	.75287	.74993	.74702	.74413	.74126	.73842	.73561	.73282	.73006	.72732
99	.76401	.76117	.75834	.75555	.75277	.75002	.74730	.74459	.74191	.73926
100	.77494	.77219	.76946	.76676	.76408	.76142	.75878	.75616	.75357	.75099
101	.78580	.78315	.78052	.77791	.77532	.77275	.77021	.76768	.76517	.76268
102	.79654	.79399	.79146	.78894	.78645	.78397	.78152	.77908	.77666	.77426
103	.80724	.80479	.80236	.79994	.79755	.79517	.79280	.79046	.78813	.78582
104	.81879	.81646	.81413	.81183	.80954	.80726	.80501	.80276	.80054	.79832
105	.83005	.82782	.82560	.82340	.82121	.81904	.81688	.81474	.81260	.81049
106	.84485	.84277	.84071	.83866	.83662	.83459	.83257	.83057	.82857	.82659
107	.86311	.86124	.85937	.85751	.85566	.85382	.85199	.85017	.84835	.84655
108	.89266	.89114	.88963	.88812	.88662	.88513	.88364	.88216	.88068	.87922
109	.94563	.94484	.94405	.94326	.94248	.94170	.94092	.94014	.93937	.93860

TABLE 90CM—LIFE TABLE APPLICABLE AFTER APRIL 30, 1999

Age x	l(x)	Age x	l(x)	Age x	l(x)
(1)	(2)	(1)	(2)	(1)	(2)
0	100000	37	95969	74	62852
1	99064	38	95780	75	60449
2	98992	39	95581	76	57955
3	98944	40	95373	77	55373
4	98907	41	95156	78	52704
5	98877	42	94928	79	49943
6	98850	43	94687	80	47084
7	98826	44	94431	81	44129
8	98803	45	94154	82	41091
9	98783	46	93855	83	37994
10	98766	47	93528	84	34876
11	98750	48	93173	85	31770
12	98734	49	92787	86	28687
13	98713	50	92370	87	25638
14	98681	51	91918	88	22658
15	98635	52	91424	89	19783
16	98573	53	90885	90	17046
17	98497	54	90297	91	14466
18	98409	55	89658	92	12066
19	98314	56	88965	93	9884
20	98215	57	88214	94	7951
21	98113	58	87397	95	6282
22	98006	59	86506	96	4868
23	97896	60	85537	97	3694
24	97784	61	84490	98	2745
25	97671	62	83368	99	1999
26	97556	63	82169	100	1424
27	97441	64	80887	101	991
28	97322	65	79519	102	672
29	97199	66	78066	103	443
30	97070	67	76531	104	284
31	96934	68	74907	105	175
32	96791	69	73186	106	105
33	96642	70	71357	107	60
34	96485	71	69411	108	33
35	96322	72	67344	109	17
36	96150	73	65154	110	0

(e) *Effective dates.* This section applies after April 30, 1999.

[T.D. 8540, 59 FR 30152, June 10, 1994, as amended by T.D. 8819, 64 FR 23212, Apr. 30, 1999; T.D. 8886, 65 FR 36929, June 12, 2000]

§ 20.2031–8 Valuation of certain life insurance and annuity contracts; valuation of shares in an open-end investment company.

(a) *Valuation of certain life insurance and annuity contracts.* (1) The value of a contract for the payment of an annuity, or an insurance policy on the life of a person other than the decedent, issued by a company regularly engaged in the selling of contracts of that character is established through the sale by that company of comparable contracts. An annuity payable under a combination annuity contract and life insurance policy on the decedent's life (e.g., a "retirement income" policy with death benefit) under which there was no insurance element at the time of the decedent's death (see paragraph (d) of § 20.2039–1) is treated like a contract for the payment of an annuity for purposes of this section.

(2) As valuation of an insurance policy through sale of comparable contracts is not readily ascertainable when, at the date of the decedent's death, the contract has been in force for some time and further premium payments are to be made, the value may be approximated by adding to the interpolated terminal reserve at the date of the decedent's death the proportionate part of the gross premium last paid before the date of the decedent's death which covers the period extending beyond that date. If, however, because of the unusual nature of the contract such an approximation is not reasonably close to the full value of the contract, this method may not be used.

(3) The application of this section may be illustrated by the following examples. In each case involving an insurance contract, it is assumed that there are no accrued dividends or outstanding indebtedness on the contract.

Example (1). X purchased from a life insurance company a joint and survivor annuity contract under the terms of which X was to receive payments of $1,200 annually for his life and, upon X's death, his wife was to re-

ceive payments of $1,200 annually for her life. Five years after such purchase, when his wife was 50 years of age, X died. The value of the annuity contract at the date of X's death is the amount which the company would charge for an annuity providing for the payment of $1,200 annually for the life of a female 50 years of age.

Example (2). Y died holding the incidents of ownership in a life insurance policy on the life of his wife. The policy was one on which no further payments were to be made to the company (e.g., a single premium policy or a paid-up policy). The value of the insurance policy at the date of Y's death is the amount which the company would charge for a single premium contract of the same specified amount on the life of a person of the age of the insured.

Example (3). Z died holding the incidents of ownership in a life insurance policy on the life of his wife. The policy was an ordinary life policy issued nine years and four months prior to Z's death and at a time when Z's wife was 35 years of age. The gross annual premium is $2,811 and the decedent died four months after the last premium due date. The value of the insurance policy at the date of Z's death is computed as follows:

Terminal reserve at end of tenth year	$14,601.00
Terminal reserve at end of ninth year	12,965.00
Increase	1,636.00
One-third of such increase (Z having died four months following the last preceding premium date) is	545.33
Terminal reserve at end of ninth year	12,965.00
Interpolated terminal reserve at date of Z's death	13,510.33
Two-thirds of gross premium (⅔×$2,811)	1,874.00
Value of the insurance policy	15,384.33

(b) *Valuation of shares in an open-end investment company.* (1) The fair market value of a share in an open-end investment company (commonly known as a "mutual fund") is the public redemption price of a share. In the absence of an affirmative showing of the public redemption price in effect at the time of death, the last public redemption price quoted by the company for the date of death shall be presumed to be the applicable public redemption price. If the alternate valuation method under 2032 is elected, the last public redemption price quoted by the company for the alternate valuation date shall be the applicable redemption price. If there is no public redemption price quoted by the company for the applicable valuation date (e.g., the valuation date is a Saturday, Sunday, or holiday), the fair